A Complete Bibliography of Publications in the *Proceedings of the VLDB Endowment*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: `beebe@math.utah.edu`, `beebe@acm.org`, `beebe@computer.org` (Internet)
WWW URL: `https://www.math.utah.edu/~beebe/`

03 October 2025
Version 1.96

Title word cross-reference

(k,ϵ) [3568]. (k,r) [1712]. (p,q) [2817]. ++ [624]. $100\times$ [2916]. 2 [3927]. 3 [2340, 338, 2098, 4239]. >100 [3326]. $^{+}$ [3553, 1838]. ^{2} [3969, 2007, 4356, 1588]. ^{3} [3399]. $^{\mathrm{link}}$ [3259]. $^{\pm}$ [4349, 2581]. $_{1}$ [2789]. $\bowtie$ [3562]. c [1221]. ϵ [2794, 184]. γ [1088]. h [3357]. K [3892, 2814, 1453, 3950, 3365, 1493, 4182, 2694, 624, 29, 1913, 901, 373, 1692, 2097, 3025, 1266, 3173, 3822, 1006, 2554, 3345, 4334, 1035, 2113, 1490, 21, 198, 1222, 424, 1340, 959, 1443, 3799, 609, 1081, 1284, 2038, 3992, 86, 1691, 968, 3188, 2416, 27, 4007, 1231, 1800, 2289, 2444, 1836, 657, 1879, 3052, 3904, 3296, 785, 1819, 1899, 2371, 854, 666, 586, 520, 815, 1387, 2264, 811, 3592, 1791, 2379, 1248, 372, 564, 1501, 4065, 87, 417, 3411, 1213, 1272, 3254, 3757, 49, 1036, 2645, 1070, 1503, 4223, 2271, 249]. $k*$ [2447]. $k/2$ [2110]. l [591]. L_1 [1647]. n [2242, 1002]. $\pm$ [2900, 3591]. r [571, 2843]. ρ [432]. s [2819, 2104, 2296]. t [2819, 2104, 2296]. $\tilde{O}(\min d_t, \sqrt{m})$ [3389]. w [4106, 3303].

***** [2319].

-approximate [1221, 184]. **-automorphism** [249]. **-Best** [3411]. **-biclique** [2817]. **-Bitruss** [3568]. **-center** [2097]. **-Clique** [3822, 4223, 2444, 2379]. **-cliques** [571]. **-Core** [3254, 3757, 2289, 815, 1712, 1453]. **-Cores** [4065, 2645]. **-DB** [1088]. **-Event** [4106, 3303]. **-function-based** [3025]. **-gram** [2242]. **-grams** [1002]. **-graph** [1647]. **-hash** [3259]. **-hop** [2110]. **-Means** [3296, 624, 1691]. **-nearest** [1493, 1692].

-Nearest-Neighbor [87, 3365]. **-partite** [2447]. **-path** [1081]. **-Plex** [4182, 3992, 3173]. **-ranks** [1070]. **-regret** [1035, 1443]. **-Star** [3357]. **-tree** [2451, 4082, 3553, 596, 2898]. **-trees** [2843, 1288]. **-uncertainty** [432].

/- [3945].

1.1 [3535]. **100M** [2787]. **11g** [110, 112, 283]. **12c** [1780, 1374]. **12R** [4288]. **12R-Bot** [4288]. **'14** [2623, 2663].

2 [4302]. **2-Hop** [4211, 4113, 4256]. **2.0** [126, 2180, 4274, 2214, 1158]. **2014** [1187]. **2023** [3526, 3522]. **2024** [3940, 3933, 3939]. **2R** [2406]. **2SCENT** [1942]. **2X** [1506].

3 [2648, 3132, 3030]. **3D** [2020]. **3X** [54, 362].

4 [3518].

6 [1128].

7 [1199, 1275].

864 [1199].

99.99-th [2768].

A* [426]. **A*-tree** [426]. **A.M.B.R.O.S.I.A** [2305]. **A/B** [860, 3069]. **AA** [1161]. **AAA** [3682]. **AB-tree** [2948]. **Abbreviations** [3852, 1839]. **ABC** [2971]. **abductive** [2133]. **ability** [2439]. **able** [1766]. **aborts** [1494]. **Absolute** [3380, 2651, 1838]. **Abstention** [3580]. **abstract** [1388]. **abstraction** [1939, 2627, 2669]. **Abstractions** [3702]. **abyss** [1584, 1239]. **Accelerated** [3537, 3997, 3250, 4010, 3909, 3555, 3206, 3039, 4059]. **Accelerating** [2816, 3741, 2388, 3530, 3725, 3683, 2155, 3634, 4225, 3293, 2670, 3608, 3679, 3646, 3820, 2526, 4253, 1572, 3318, 3636, 3385, 1843, 3248, 4322, 701, 2100, 4027, 2611, 3988, 2820, 2814, 2676, 3036, 1990, 2074, 698, 3123]. **Acceleration** [3342, 4246, 3446, 3145, 3058, 1933, 2268, 869, 2806]. **Accelerator** [4294, 3968, 2672, 1771, 290, 1083]. **accelerators** [2505]. **Access** [3654, 4205, 3830, 68, 4250, 440, 625, 1280, 2996, 2452, 1777, 923, 1403, 272, 1473, 2744, 2492, 2436, 2994, 376, 1516, 2589, 256, 839]. **Accesses** [3636, 2589]. **accessible** [2205]. **Accio** [4122]. **ACCORDA** [2155]. **accordance** [1763]. **Accordion** [1973, 1095, 4323]. **Accuracy** [3822, 3720, 4216, 4141, 3979, 36, 3723, 3208, 4242, 3778, 3585, 1902, 2720, 2163, 3010, 431, 2420, 268, 3019, 2626, 2511, 819]. **Accuracy-Aware** [3208, 3585, 819]. **Accuracy-Enhanced** [3979]. **accuracy-guaranteed** [2420]. **Accurate** [3972, 3789, 2925, 3589, 4165, 3651, 3309, 3955, 3219, 3771, 4215, 4058, 4228, 2712, 203, 206, 2205, 1706, 658, 615, 2917, 2639, 550, 2664, 2520, 1637, 2493, 2309, 2603]. **accurately** [2097]. **ACE** [4121]. **Achieving** [2598, 452, 4290, 320]. **ACID** [3373]. **acquaintance** [546]. **Acquisition** [3642, 2920, 1651, 2068, 2630, 2716]. **acquisitional** [7]. **acronym** [3001]. **Acronyms** [3852]. **Across** [3635, 3737, 4308, 3756, 4119, 9, 3374, 2008, 950, 4090, 340, 3373, 1762, 4335, 384, 832, 931, 2357]. **Across-Silo** [3756]. **Act** [4198]. **ACTA** [3247]. **Action** [3513, 3874, 3885, 3481, 4315, 3894, 3478, 2013, 2198, 750, 2742, 1415, 2748, 500, 1979, 916, 2014, 2749, 1802, 748, 3110, 3118, 2216, 2708, 2184, 905, 2196, 1998, 3125]. **actionable** [3138]. **Actions** [3797]. **Active** [1808, 3615, 481, 567, 3099, 2047, 2809, 1232, 309, 62]. **ActiveClean** [1531]. **Actively** [3697, 796]. **ActivePDB** [3099]. **activity** [1023]. **Actor** [3823, 4184, 2316]. **Actor-Oriented** [3823]. **AcX** [3001].

Acyclic [4144, 2698]. **Ad** [3499, 134, 3973, 78, 1291, 459, 1944, 2202, 2294, 325, 109, 1609, 511]. **Ad-Hoc** [3499, 134, 3973, 78, 459, 1944, 2202, 2294, 109]. **AD-WIRE** [1609]. **AdaChain** [3319]. **AdaNDV** [4048]. **Adaptable** [4199]. **Adaptation** [3601, 3477, 3603, 729, 2842, 3106]. **AdaptDB** [1677]. **Adapters** [4109]. **Adapting** [2246, 4018, 2959, 2491]. **Adaptive** [200, 976, 163, 871, 3259, 1780, 4278, 4325, 3228, 2084, 3645, 1689, 1102, 471, 3356, 3441, 2580, 3811, 1929, 1631, 4155, 3234, 3682, 3319, 4048, 3840, 3335, 2556, 3390, 750, 1440, 1412, 2481, 2161, 406, 2758, 1040, 627, 614, 1277, 1911, 563, 1935, 615, 1677, 1879, 2502, 2399, 3006, 1721, 1344, 1334, 1799, 1665, 845, 1625]. **Adaptively** [227, 3378, 3517, 3307]. **Adaptivity** [3624]. **add** [1609]. **add-on** [1609]. **ADDICT** [1209]. **Adding** [633, 170]. **Additional** [3777]. **Addressable** [3324, 3655]. **ADESIT** [2701]. **ADF** [3584]. **adiabatic** [1506]. **Adjacency** [4077, 2336]. **adjustment** [2363]. **administration** [878, 1429]. **ADnEV** [2363]. **adolescence** [850]. **ADOps** [3506]. **ADOPT** [3378, 3517]. **Adopting** [2398]. **adoption** [1775]. **Adore** [3229]. **ADS** [1398]. **Advanced** [1135, 389, 3910, 4197, 1939, 2208, 658, 1933, 1209, 1089]. **Advancing** [4261, 4123]. **advantages** [1073]. **Adversarial** [3197, 2403, 2270, 1915]. **adversaries** [236, 966]. **Advertisement** [4268]. **advertisements** [1313, 590]. **advertising** [1291, 1732, 874, 2173, 2833]. **Adviser** [3583]. **advisor** [280, 543, 1517, 722, 2702, 789, 4320]. **Advisors** [3815, 3667, 3724]. **AeonG** [3657]. **Aero** [3485]. **Aerospike** [1568]. **Aether** [401]. **Affect** [3648]. **Affiliation** [4018]. **affine** [698]. **Affinity** [4018]. **Afraid** [3696, 2037]. **After** [3150, 1718, 4037]. **Against** [3159, 3894, 3402, 2961, 3347, 1926, 3479, 236, 2653, 4235]. **Agamotto** [4102]. **age** [2735, 1184]. **Agent** [4276, 4224, 3838, 4004]. **Agent-OM** [4004]. **Agentic** [4190]. **Agents** [3935, 4004, 3086]. **AggChecker** [2210]. **agglomerative** [2894, 2828]. **Aggregate** [903, 4261, 4070, 1101, 1335, 4232, 2846, 139, 2200, 983, 3172, 2036, 825]. **Aggregated** [2501, 4239, 4024, 1946, 2582]. **aggregates** [224, 2673, 1147, 1189, 1554]. **Aggregating** [957, 455]. **Aggregation** [999, 3943, 3656, 613, 4125, 3636, 3210, 3385, 3592, 3410, 1324, 1957, 2418, 1434, 2116, 1181, 1071, 2301, 2670, 2456, 2063, 1841, 2626, 1745, 1281, 2126, 1459, 1861]. **aggregations** [1133, 207]. **aggressive** [705, 1556, 1159]. **agile** [1766, 3780]. **Agile-Ant** [3780]. **Agnostic** [3392, 4152, 1478, 2597, 1365]. **AgoraEO** [3101]. **AgreementMaker** [313]. **AGV** [4132]. **Ahead** [3825, 1263, 339, 211, 1141, 1702]. **AI** [3136, 3442, 2545, 2779, 4304, 3938, 3461, 2255, 3782]. **AI-driven** [2779]. **AI-powered** [3136, 2545]. **AI/ML** [2255]. **aid** [464]. **AIDA** [1939]. **AIDE** [1411]. **Aided** [3336, 2350, 1219]. **AIM** [3006]. **air** [407]. **Airbnb** [4301]. **AJAXSearch** [126]. **AJoin** [2294]. **ALAE** [698]. **Albatross** [555]. **Alchemy** [4189]. **ALECE** [3558]. **Aleph** [3817]. **Algebra** [3394, 1903, 2637, 1730, 1532, 1995, 2616, 983, 1627, 2034, 2400, 2591]. **algebra-based** [1903, 2034]. **Algorithm** [4144, 4233, 3805, 3948, 4023, 3256, 3020, 3591, 3610, 2462, 1741, 2919, 1514, 1043, 1351, 663, 1647, 2555, 2528, 1330, 1034, 1942, 1031, 2274, 830, 1914, 2719, 556, 600, 32, 2280, 1322, 2379, 1701, 258, 2496, 2894, 77, 1090, 1682, 3012, 2900]. **algorithm-system** [2528]. **Algorithmic** [3602, 1311, 476, 2619, 2033]. **Algorithms** [4261, 3575, 4332, 3974, 3291, 3216, 3378, 3573, 628, 3764, 3748, 2620, 553, 1455, 1671, 2481, 2637, 2370, 2446, 1667, 2604, 1945, 917, 2534, 2377, 906, 2353, 2166, 2327, 1215, 1911, 2090, 1474, 277, 2617, 1704, 2175, 2158, 2104, 1430, 2042, 2433, 2456, 790, 2424, 1868, 2350, 2606, 1560, 464, 1314, 1061, 2538, 1052, 815, 2045, 177, 2159, 1950, 665, 769, 2893, 955, 2911, 2376, 1098, 1275, 2728, 3109, 1203, 1503, 1678, 1948]. **Alibaba** [2247, 2230, 4296, 4297]. **ALID** [1292]. **Aligning** [4142, 2824]. **Alignment** [3676, 4234, 1548, 2193, 2939, 187, 585, 2429, 698]. **alignments** [699]. **AliGraph** [2233]. **alive** [2746]. **all-pair** [631]. **All-Range** [3365]. **Allocation** [3532, 3533, 1291, 163, 1514, 2495, 2397, 2708]. **almost** [2796, 2097, 3174, 2584]. **Alphabets** [4373]. **ALT** [3150]. **altering** [2320]. **Alternated** [3992]. **Alternative** [3668, 2423]. **alternatives** [1392]. **AlvisP2P** [122]. **Always** [3696, 3163, 1508, 2037, 2862]. **always-on** [2862]. **Amazon** [2772, 2435, 3821]. **Amber** [2316]. **Ambiguities** [4051]. **AMNES** [3530]. **Amnesia** [3770]. **Amoeba** [1603]. **among** [1544, 428]. **amongst** [966]. **Amplification** [3767, 3684]. **AMRAS** [3112]. **Analyses** [3880, 3494, 3648, 3009]. **Analysis** [3902, 3589, 3887, 3882, 4359, 3707, 3147, 4343, 3929, 4312, 3904, 1914, 4262, 3955, 3414, 4327, 3973, 4244, 3445, 4351, 4028, 3333, 3493, 3604, 3390, 4323, 3605, 3927, 3673, 4050, 2833, 4292, 3821, 1778, 2770, 501, 739, 1921, 35, 410, 118, 175, 360, 1324, 568, 2695, 3025, 294, 321, 629, 703, 2566, 920, 1042, 2155, 2800, 2144, 746, 2457, 332, 2259, 2249, 1562, 1114, 2725, 1508, 2535, 3096, 2663, 754, 2068, 2793, 3104, 2890, 1190, 369, 2470, 1041, 925, 1542, 919, 2709, 1509, 100, 1057, 850, 1460, 741, 3138, 2184, 2671, 273, 1580, 992, 769, 2156, 2021, 2213, 2323, 990, 337, 320, 772]. **analysis** [2477, 947, 1540, 1621, 2211, 135, 179, 3112, 2972, 736, 1272, 686, 1074, 1904, 2625, 2973, 786]. **Analyst** [3227, 2628]. **analysts** [759]. **Analytic** [3221, 726, 3446, 4295, 676, 1557, 109, 1145]. **Analytical** [3433, 4166, 3337, 3446, 3396, 3495, 3808, 3278, 4375, 247, 1846, 2227, 727, 2434, 2207, 2677, 3083, 1371, 1312, 1083, 832, 1631, 2737, 803, 1093, 1797, 1148, 1170, 2539]. **AnalyticDB** [3441, 2230, 4296]. **AnalyticDB-PG** [4296]. **Analytics** [3730, 3769, 3160, 3375, 3353, 3966, 4275, 3704, 3274, 3291, 4193, 3499, 4138, 3567, 3198, 3824, 3409, 3894, 3468, 3934, 3812, 4318, 3710, 4361, 4059, 3960, 3372, 4321, 4252, 3519, 3272, 903, 1390, 1903, 1607, 1859, 459, 2179, 1399, 2048, 1611, 1538, 1366, 1235, 1970, 2269, 3091, 977, 1255, 1620, 1569, 2672, 1424, 1547, 1426, 1433, 715, 1893, 1413, 1939, 2208, 2757, 1766, 3117, 2065, 2356, 1369, 885, 3077, 882, 718, 1465, 1700, 2249, 2537, 1172, 1181, 2002, 2301, 2490, 3134, 1430, 2225, 1796, 1458, 921, 940, 2792, 1802, 658, 724, 1321, 1268, 1622, 1722, 742, 1650, 2342, 1196, 659, 1558]. **analytics** [1601, 3124, 2218, 1933, 3056, 1731, 1572, 2319, 1817, 1909, 1952, 1958, 1561, 973, 1173, 2214, 941, 2355, 1843, 1968, 1444, 1666, 2676, 1128, 2215, 1184, 1325, 2438, 1701, 2034, 2171, 1450, 1599, 2861, 2051, 733, 2055, 2191, 1137, 1690, 2551, 1890, 2209, 636, 1194, 1117, 1948, 2556, 3071, 2091, 2585, 2018, 4043]. **analytics-aware** [2757]. **Analyzing** [1844, 4302, 3374, 64, 3383, 2543, 2940, 3327, 2079, 3652, 433, 304, 2571, 763, 1783, 2659, 381, 2460]. **Ananke** [2514]. **Anarchy** [4110]. **anchor** [2555]. **Anchored** [4012]. **Anchors** [3325]. **Angel** [3452]. **Angel-PTM** [3452]. **ANGIE** [309]. **ANN** [4133, 3949, 2806]. **Anna** [2087]. **Annealing** [3581]. **annihilator** [3110]. **annotated** [682, 235]. **Annotating** [1404, 458, 1525]. **Annotation** [3715, 3265, 4197, 811, 2046, 1178]. **Annotations** [4064, 170]. **annotators** [957, 904]. **ANNS** [3150, 2789]. **ANNS-ALT** [3150]. **ANNS-L** [2789]. **anomalies** [3113, 1290, 209, 2461, 2504, 1396].

Anomaly [3570, 3253, 3271, 4090, 3864, 4354, 4171, 2944, 3768, 3931, 3506, 3425, 4025, 3981, 4105, 4342, 3579, 3603, 4259, 4052, 2393, 2748, 2621, 3115, 3116, 1468, 2738, 2692, 2938, 3019, 2115, 2985, 2899, 3109, 1716]. **Anonymity** [3908]. **Anonymization** [248, 234, 432, 321, 250, 13]. **anonymized** [433, 12]. **Anonymizing** [69]. **Anonymous** [3253]. **Anser** [3441]. **answer** [1415, 980, 981]. **Answering** [4261, 668, 2829, 2123, 1284, 3622, 194, 837, 2321, 328, 648, 3227, 586, 3779, 3890, 3775, 3307, 2513, 3692, 3838, 3047, 1143, 1392, 1586, 2631, 1675, 1032, 615, 1651, 1879, 2709, 2590, 3105, 1937, 554]. **Answers** [3267, 1997, 2714, 304, 356, 2501, 61, 2503, 1338, 1989, 515, 2200, 590, 1481, 3172, 2376, 1892, 2036, 1694, 796, 1202]. **Ant** [3780, 2232]. **anti** [2303, 2699, 833, 995]. **Anti-caching** [995]. **anti-correlated** [833]. **anti-knowledge** [2303]. **anti-patterns** [2699]. **Anticipatory** [239]. **Any** [3432, 2100]. **any-precision** [2100]. **AnyBlox** [4263]. **anymore** [2757]. **AnyOLAP** [2737]. **Anytime** [2374, 941, 2570]. **anywhere** [941]. **Apache** [2770, 2362, 1772, 4097, 1290, 3767, 1964, 4274, 3830, 3489, 2317, 3752, 4217, 1363, 3185, 2972, 3493, 3849]. **APEX** [4340, 2852]. **APEX-DAG** [4340]. **API** [3504]. **APIs** [317, 1626]. **APOLLO** [2267]. **Append** [3384]. **apperception** [2723]. **Appliance** [3584]. **Application** [3257, 2142, 607, 2624, 720, 887, 725, 2605, 1489, 2151]. **application-specific** [2151]. **Applications** [3780, 3897, 3281, 3910, 3560, 3421, 3476, 3399, 3257, 4315, 3161, 4282, 3240, 3459, 4114, 2574, 2013, 3113, 2093, 3126, 2071, 2248, 2465, 1163, 695, 923, 167, 368, 126, 3131, 1081, 46, 2305, 1837, 1046, 729, 2303, 1934, 748, 1406, 884, 2427, 1345, 1909, 1417, 3121, 155, 273, 2737, 1803, 1875, 2021, 2589, 1820, 2804, 481, 1920, 751, 2083, 17, 1197].

applied [1479]. **Applying** [3304, 3975]. **Approach** [4256, 4165, 4068, 3659, 3906, 4200, 4241, 4163, 3956, 3671, 4283, 4105, 3556, 3920, 4210, 4089, 3797, 4237, 3727, 1737, 1376, 1092, 987, 440, 1054, 2987, 1913, 901, 2596, 2895, 344, 995, 197, 982, 1151, 828, 2673, 880, 287, 602, 873, 81, 578, 348, 1375, 2528, 1004, 2993, 1995, 1276, 1706, 401, 2442, 1885, 604, 2089, 212, 1257, 1448, 2039, 1863, 884, 3015, 484, 3072, 90, 2436, 1884, 1852, 3038, 1422, 1550, 2666, 772, 2497, 2992, 525, 1956, 1108, 1853, 1356, 2476, 1342, 2441, 2859, 618, 1016]. **Approaches** [4254, 3882, 310, 383, 1819, 2625]. **Approaching** [2589]. **Approximate** [3972, 4256, 3749, 4026, 3235, 3805, 3668, 1274, 4225, 3533, 1475, 3651, 4160, 2405, 2328, 4049, 2383, 717, 4206, 66, 2449, 4056, 962, 1839, 3490, 3712, 4100, 4012, 3315, 4287, 3365, 1902, 1208, 2455, 203, 2872, 828, 2292, 2075, 1724, 2369, 334, 1944, 2202, 1079, 1452, 1634, 2670, 1891, 3048, 1661, 2342, 1066, 2366, 2825, 1509, 2282, 1298, 2671, 2156, 955, 1221, 1002, 1633, 1645, 2640, 3184, 184, 445, 2581, 2309]. **Approximately** [1847]. **Approximating** [2651, 3226, 3190, 108, 2421, 2236, 172]. **Approximation** [4086, 3267, 3309, 3713, 4351, 3387, 4139, 1709, 182, 1072, 2624, 1204, 819]. **Approximation-First** [4139]. **approximations** [963, 1296, 939, 1637]. **ApproxML** [2202]. **apps** [964]. **AQETuner** [4166]. **AQUA** [3495]. **AQWA** [1440, 1412]. **arbitrage** [1067]. **arbitrage-free** [1067]. **Arbitrary** [3567, 3771, 943, 450, 2871, 1641, 2737, 1861]. **arc** [1639]. **ArcheType** [3715]. **ArchimedesOne** [1576]. **Architecting** [3790]. **architectural** [247, 2323]. **Architecture** [3609, 3363, 4371, 1844, 1589, 3002, 107, 1346, 995, 2155, 1769, 1369, 1975, 853, 1877, 25, 330, 2649, 1361, 403, 1568, 1161, 3169].

Architectures [4267, 3374, 3258, 188, 1118, 1249, 2239, 1507, 938, 2271]. **Archival** [3310, 1193, 74, 2521]. **archives** [266, 931]. **archiving** [3097, 219, 462, 98]. **ARDA** [2361]. **area** [303, 1458]. **Argonaut** [1362]. **Aria** [2409]. **ARKGraph** [3365]. **Armed** [3615, 2420]. **arrangements** [2391]. **Array** [2776, 3478, 2113, 2352, 1330, 925, 1657, 1928, 3125, 3095, 636, 1528]. **array-based** [2352]. **ArrayMorph** [4201]. **arrays** [426]. **ARShop** [1784]. **Art** [4366, 3586, 4364, 4362, 3465, 2050, 3134, 3127, 2760]. **Artemis** [304]. **Articles** [3876]. **artifact** [1856]. **artifacts** [483]. **Artificial** [3442]. **Arx** [2162]. **ASAP** [1742]. **Ask** [3696, 697, 2037, 535, 2010]. **Asking** [4372]. **aspects** [147]. **Assassin** [2719]. **assemblage** [3018]. **Assertions** [3857]. **Assess** [4015]. **Assessing** [3784, 1003]. **Assessment** [4015]. **Asset** [4367]. **assets** [2401]. **Assignment** [3247, 4018, 3411, 2440, 1941, 1383, 1740, 258]. **assignments** [224]. **Assistant** [3884, 3883, 4346, 2173]. **assistants** [2735]. **AssistEd** [4043, 4355, 3891, 4089, 1154, 1541, 2986, 535, 3118]. **assisting** [3093]. **Association** [1349, 3880, 907, 2921, 795, 584]. **Associations** [3632, 266, 461, 2396]. **Aster** [1128]. **ASTERIX** [739]. **AsterixDB** [1607, 2362, 1210, 1076, 2149]. **Astrid** [2520]. **Asymmetric** [4145, 2377, 2137, 1161]. **asymptotic** [1739]. **Asymptotically** [3394]. **Async** [3244]. **Async-Fork** [3244]. **Asynchronous** [4123, 4175, 1473, 3798, 1353, 1303, 2358, 1711, 866, 1090]. **ATHENA** [1553, 2459]. **ATLANTIC** [2720]. **Atomic** [2357, 2761, 3193, 2086, 2576]. **Attack** [4244, 2176, 1961, 99]. **Attacks** [3402, 4358, 3602, 433]. **Attention** [3558, 3786, 1742]. **Attention-based** [3558]. **Attraction** [1015]. **attractive** [586]. **Attractors** [3146]. **Attribute** [3209, 3533, 1707, 4353, 3569, 3210, 3378, 3517, 2937, 2144, 2329, 611, 230]. **attribute-aware** [2144]. **Attribute-driven** [1707]. **Attribute-Oriented** [3533]. **attribute-structure** [611]. **Attributed** [3737, 3783, 1555, 2902, 2971, 2128, 611, 2486]. **Attributes** [3777, 221, 605, 2999, 85]. **attributing** [437]. **Attribution** [4261]. **Auction** [3639]. **Auctus** [2729]. **audit** [2794, 267]. **auditable** [3050]. **AuditGuard** [137]. **auditing** [572, 805, 137]. **Auditor** [505]. **Augmentation** [3424, 3804, 4229, 2729, 2604, 2545, 2361, 194, 2775, 2580, 2600]. **Augmentations** [4353]. **Augmented** [4207, 3968, 4356, 3890, 2102, 1784]. **augmenting** [3088, 2850]. **Aurora** [3847]. **Authenticated** [4232, 649, 1285]. **Authenticating** [1006, 14]. **authentication** [823]. **Authenticity** [4331]. **Authoring** [3858]. **authorization** [1854]. **Auto** [3523, 4332, 3874, 3241, 1204, 1405, 2905, 1058, 2432, 4129, 3423, 3360, 2688, 1715]. **Auto-approximation** [1204]. **Auto-BI** [3360]. **auto-encoders** [1058]. **Auto-Generated** [3523]. **Auto-join** [1715]. **Auto-pipeline** [2688]. **Auto-Prep** [4129]. **Auto-Recommender** [4332]. **auto-scaling** [2905]. **auto-suggestion** [1405]. **Auto-Tables** [3423]. **Auto-transform** [2432]. **Auto-Tuning** [3874, 3241]. **Autocompletion** [215, 1521, 514, 810, 1587]. **AutoCTS** [2882]. **AutoDI** [3096]. **Autoencoders** [4025]. **AutoExecutor** [2745]. **AutoG** [1587]. **AUTOGR** [2605]. **Automated** [3080, 58, 2724, 3415, 4301, 4354, 2619, 3894, 3976, 1878, 2134, 4292, 495, 2741, 3076, 1596, 2226, 2170, 1144, 464, 2219, 1379, 2438, 2605, 2882, 466]. **Automatic** [3286, 4280, 695, 3883, 531, 949, 3984, 545, 4285, 392, 2716, 3200, 3740, 3456, 3495, 2052, 1701, 3393, 3907, 2480, 2013, 2596, 2361, 1044, 1411, 2267, 3096, 997, 2218, 2719, 3105, 2178, 612, 2583, 1978, 2585]. **Automatically** [3360, 3816, 2847, 525, 1150]. **Automating**

[1793, 2613, 2266, 1967, 3754, 2058]. **automaton** [168]. **AutoML** [2993, 3223, 2655, 2647]. **automorphism** [249]. **Autonomous** [4293, 3895, 3838, 3046, 2762]. **Autonomously** [3349]. **Autonomy** [3247]. **AutoOD** [3116]. **AutoPrep** [4224]. **Autoregressive** [3359]. **Autoscaling** [3454, 2087, 3851]. **AutoSteer** [3432]. **AutoTQA** [3838]. **AutoTSAD** [3768]. **Auxo** [3270]. **Availability** [3560, 694, 2160, 1773]. **available** [1017, 533, 1567]. **Avalanche** [354]. **Avalanche-safe** [354]. **AvantGraph** [3114]. **Avatara** [733]. **Averaging** [3546, 2870]. **avoid** [1862]. **avoidance** [1237, 1015, 2043]. **Avoiding** [4070, 3798, 976, 2956]. **Awakening** [3528]. **award** [2471, 3139, 3525]. **Aware** [4178, 3789, 4238, 4026, 4332, 3804, 3295, 4224, 4021, 3985, 3704, 4177, 3546, 3646, 3381, 3427, 4084, 3700, 3367, 3208, 3343, 3215, 3557, 3454, 3370, 3981, 3418, 3921, 4061, 3585, 4132, 3946, 4344, 3563, 4229, 3606, 4057, 1903, 1252, 1440, 1412, 440, 2093, 3047, 2832, 2955, 341, 667, 1024, 881, 2848, 1278, 1708, 1985, 2757, 928, 2144, 3086, 2634, 3010, 1119, 1474, 442, 162, 1452, 378, 2225, 514, 438, 569, 2354, 477, 1257, 1031, 1800, 2235, 1882, 1863, 2063, 2746, 2593, 662, 2319, 2684, 2956, 1344, 1631, 1733, 1550, 2880, 605, 2111, 1883, 269, 388, 257, 2333, 1206, 59, 1890, 375, 1342, 1637, 3012, 1658]. **aware** [1898, 783, 819, 1254]. **Awareness** [3720, 3930, 472, 2572]. **awareness-to-influence** [2572]. **away** [825]. **AWS** [3435]. **AXART** [483]. **Axiomatic** [1945]. **axiomatization** [1688]. **AXML** [483]. **AZDBLab** [1165]. **Azure** [2905, 2237, 4270, 2879, 2763, 1365, 4298].

B [986, 50, 3259, 1288, 2451, 4082, 860, 3553, 596, 646, 3069, 447, 3391, 2898]. **B-tree** [50, 447, 646]. **B-Trees** [3391, 986].

Babelfish [2821]. **BABOONS** [3035]. **BACH** [4077]. **back** [1432, 1118, 2102]. **Backed** [3399, 3257]. **bad** [252, 1808]. **Bagua** [2868]. **Balance** [2111, 2760]. **Balance-aware** [2111]. **Balanced** [3978, 3568, 4264, 3722, 3839, 2107, 2995]. **Balancing** [4198, 4331, 4323, 1376, 2093, 1622]. **bandit** [2596]. **Bandits** [3615, 2420, 3180]. **bandwidth** [2846, 1834, 1622]. **bandwidth-optimized** [1834]. **Banyan** [2964]. **Baran** [2402]. **barrierless** [1303]. **BART** [1455]. **base** [2733, 872, 2786, 2303, 2337, 1840, 1605, 1333, 1400, 40, 1202, 3313]. **Based** [3516, 3953, 3693, 3321, 3282, 3503, 3726, 3497, 4103, 4207, 3943, 3359, 3769, 3962, 3283, 3295, 4019, 4161, 3776, 3801, 3362, 3589, 3196, 4183, 4165, 4117, 4208, 4308, 4160, 3679, 4185, 3223, 3298, 3961, 3969, 3639, 3942, 3906, 3572, 3680, 4167, 4291, 4133, 4184, 4039, 3678, 3956, 3215, 3582, 3912, 4137, 3473, 3584, 3850, 3151, 3752, 4288, 3760, 3783, 3949, 4342, 4115, 2633, 4100, 3896, 3666, 3388, 3149, 3714, 3583, 4240, 4287, 3930, 3907, 3988, 4259, 4057, 3698, 2712, 1903, 1737, 9, 2413, 2362, 2967, 1905, 18, 1907, 175, 1143, 504, 900, 234, 645, 2320, 1777, 2393, 1741, 1392, 1590, 699, 373, 2192, 3025, 2895, 1006]. **based** [1717, 2925, 3004, 1309, 561, 835, 2989, 2411, 923, 433, 2195, 917, 1482, 1521, 167, 1302, 780, 1523, 1011, 572, 131, 2148, 2352, 3021, 817, 1250, 1647, 1957, 857, 1769, 873, 578, 3228, 1295, 623, 503, 2682, 380, 2993, 2485, 949, 1465, 2047, 58, 1960, 2060, 1815, 707, 2301, 2490, 758, 1600, 222, 208, 921, 1175, 1383, 250, 151, 2316, 89, 225, 528, 477, 593, 1868, 2190, 2390, 2648, 2932, 3179, 3558, 672, 2727, 2070, 2007, 542, 735, 821, 1335, 1442, 1672, 1713, 2836, 2788, 3124, 4008, 1225, 1530, 2541, 2825, 1641, 2080, 2295, 2502, 120, 2128, 1359, 1517, 165, 679, 2319, 2719, 2664, 2841, 470, 2199]. **based**

[2268, 3244, 1478, 187, 655, 1287, 1915, 1884, 2499, 1149, 2863, 82, 1841, 1193, 1829, 1319, 876, 596, 3081, 155, 324, 482, 211, 992, 1113, 1755, 1991, 2666, 1804, 2111, 2285, 2429, 2860, 1688, 725, 1028, 4025, 1248, 2034, 525, 1543, 2494, 2583, 537, 2020, 517, 448, 1058, 1784, 2211, 2124, 2478, 2484, 2640, 2812, 2913, 2947, 2894, 452, 1853, 447, 1629, 2095, 2412, 1992, 1170, 408, 1211, 1653, 894, 379, 796, 3102, 582, 2046, 2404, 3020, 2136, 1003, 1928, 2608, 628, 1171, 1678, 3012, 2973, 1016, 820, 2764, 3594, 230, 1686, 2683, 2970, 1764, 3564]. **Baselines** [3303]. **bases** [2001, 1814, 1408, 1675, 967, 1498, 2175, 1218, 927, 1987, 1379, 488, 2773, 1184, 2557, 1658, 1576]. **basic** [979]. **basics** [711]. **Batch** [4055, 4032, 4365, 4126, 1131, 2143, 685]. **Batch-Dynamic** [4032]. **Batched** [3311, 91]. **Batches** [3798]. **batching** [2054]. **Bayesian** [3214, 3689, 3538, 2689, 268, 608, 618]. **BayesStore** [30]. **BCC** [1494]. **BDMS** [1210]. **Be** [3420, 1535, 1940, 4324, 2994, 2827]. **Beaconnect** [3069]. **Beam** [1964]. **bearing** [470]. **beautiful** [1439]. **became** [330]. **Become** [3303]. **Before** [3965, 330, 1952]. **beginning** [1439]. **Behaving** [3661]. **Behavior** [3561, 3820, 379, 1472, 456, 652, 1244]. **Behavioral** [425, 306]. **Behaviors** [3439, 2176, 1648]. **behind** [1656, 1618]. **belief** [1680, 170, 1270]. **Believe** [170, 2185]. **bench** [2996, 1025, 3421]. **Benchmark** [3566, 3442, 3688, 4173, 3629, 3996, 3889, 3221, 4063, 3819, 4188, 3648, 3232, 3306, 4028, 3595, 3614, 3438, 3272, 22, 2924, 156, 2958, 2797, 2392, 2864, 1562, 2692, 2246, 2120, 2938, 1124, 1148]. **Benchmarking** [3897, 3884, 3650, 3421, 1111, 2483, 3721, 4171, 3303, 4009, 3717, 3437, 4252, 2996, 1025, 3059, 2738, 1926, 2857, 2339, 2429, 1307, 3109]. **benchmarks** [2709, 3105]. **Benefit** [3565, 3658]. **Benefits** [3151].

BERT [3582, 2940, 2636, 3132]. **BERT-Based** [3582]. **Best** [3745, 3411, 329, 2446, 1919, 2433, 1661, 402]. **best-effort** [1661]. **Better** [3394, 877, 1973, 2512, 2908, 2590, 2253, 2476]. **Between** [4254, 3874, 1703, 255, 1054, 3313, 460, 2661, 592, 4294, 3496, 3647, 3372]. **Betweenness** [3796, 1456, 1342]. **Beyond** [4350, 4204, 2070, 3498, 4234, 1243, 2691, 2303, 1828, 251, 971, 455, 2807]. **BF-tree** [1208, 3802]. **BFT** [4123, 3872]. **BFTGym** [3872]. **Bi** [4088, 4209, 2546, 2560, 3360, 502]. **Bi-Directional** [4088, 4209, 2546]. **BI-Models** [3360]. **bi-triangle** [2560]. **Bias** [1708, 2016]. **Bias-aware** [1708]. **biasing** [1912]. **Biathlon** [3741]. **BICE** [3330]. **bichromatic** [1490, 264]. **Biclique** [4042, 2927, 2360, 2817]. **bicliques** [3043]. **Biclustering** [2385]. **bidding** [526]. **Bidirectional** [3713, 2588]. **Big** [507, 3780, 1437, 942, 889, 2766, 3135, 3415, 3446, 3928, 4022, 4011, 1438, 3145, 3485, 1130, 3329, 1940, 1813, 1440, 1412, 1703, 878, 871, 2146, 1160, 1163, 977, 727, 2234, 294, 1893, 157, 768, 1394, 1821, 2026, 836, 2751, 2921, 880, 1183, 1822, 1224, 1337, 2609, 2858, 949, 1367, 1049, 2236, 2281, 1182, 1818, 777, 991, 2288, 1152, 1186, 1622, 1536, 1286, 2218, 3044, 1190, 1731, 1816, 2771, 720, 2449, 1422, 2221, 1994, 806, 1603, 769, 1128, 2213, 1616, 1122, 1184, 1602, 879, 1198, 736, 2083, 1137, 1499, 2551, 2874, 636, 1171, 1776, 739, 1235, 1808, 1438]. **big-data** [2236, 2281, 2288, 1731, 2449]. **big-graphs** [1182]. **bigdata** [876]. **BigDAWG** [1397]. **Bigger** [4060]. **BigST** [3625]. **BigVectorBench** [4079]. **BIIIG** [1149]. **Billion** [3326, 3842, 3630, 3556, 4290, 2819, 2360, 3008, 2321, 1007, 638, 994, 2928]. **billion-node** [1007]. **Billion-Scale** [3842, 3556, 3008, 2321, 2928]. **Binary** [3412, 4075, 283, 2549, 812, 2164, 96]. **binary-** [2549]. **bindings** [91]. **biological** [338]. **bionic** [2185]. **biosequence** [698].

Bipartite [3593, 3749, 3330, 3568, 3253, 3224, 4084, 3755, 3556, 3787, 3225, 2574, 2631, 2927, 69, 2971, 2515, 2867, 2124, 2952, 2817, 2560, 3043, 2822]. **Biperpedia** [1046]. **BIRD** [3713]. **Birdie** [4118]. **Birds** [3791, 1008, 1660]. **bisimulation** [1548, 1427]. **BiST** [4088]. **Bitcoin** [2212]. **bites** [913]. **Bitlist** [960]. **Bitmap** [3995, 2519, 1339]. **Bitruss** [3568, 2952]. **Black** [3513, 3888, 4310, 3261, 4076, 3548, 2446, 2757, 677, 3100, 3035, 2728]. **Black-Box** [3513, 4310, 3261, 4076, 3548, 3888, 2757, 3100, 3035, 2728]. **BlackMagic** [2178]. **BLAEQ** [4153]. **Blaeu** [1580]. **BLAST** [1550]. **BlazeIt** [2301]. **Blink** [740, 3426]. **BlinkFill** [1520]. **Blitzcrank** [3733]. **Block** [2125, 2731, 839, 1001, 1217]. **block-centric** [1217]. **Blockchain** [3734, 3292, 3241, 3499, 2153, 3865, 3473, 3319, 3616, 3240, 4027, 2142, 3024, 2372, 2731, 2891, 2467, 2325, 3005, 2112, 1920, 3165, 2668, 2696]. **Blockchain-Based** [3473]. **BlockchainDB** [2157]. **Blockchains** [4232, 3624, 4128, 2157, 2025, 1823, 2357]. **Blocker** [3279, 3565]. **Blocking** [3376, 3731, 3988, 2953, 1212, 1478, 1509, 1550, 2679]. **Blockjoin** [1832]. **Blocks** [3413]. **blog** [697]. **Blogel** [1217]. **blogs** [2694]. **bloom** [2908, 2431, 2955, 2078, 3810, 2277, 1486]. **Bloomberg** [1567]. **Blossom** [4212]. **blowfish** [2746]. **BLU** [869]. **Bluecache** [1653]. **Blueprint** [3072]. **Blueprinting** [3816]. **Bolt** [3158, 4122, 1723]. **Bolt-on** [3158, 4122, 1723]. **Bonding** [1342]. **BonsaiKV** [3598]. **Bonspiel** [4249]. **BonXai** [763]. **book** [2786]. **booking** [1556]. **Boolean** [2060, 2385, 4232, 173]. **Boost** [3667, 3893]. **boosted** [1409]. **Boosters** [3803]. **Boosting** [3275, 431, 3720, 3969, 644, 3627, 3970, 1771, 3179, 2551]. **Bootstrap** [3820]. **borg** [2474]. **BOSS** [3609]. **Bot** [4288, 3732]. **Both** [3434, 3900, 2573]. **bottle** [2955]. **Bottlenecks** [3758]. **bottles** [507]. **Bottom** [4165, 3886, 3809, 21, 1885]. **Bottom-Up** [3886, 4165, 3809, 1885]. **Bounces** [3419]. **Bound** [3992, 3948, 3700]. **boundaries** [617]. **Boundary** [4081, 1902]. **Bounded** [1112, 4146, 3591, 637, 1709, 1667, 2651, 2875, 2942, 1698, 2690, 2019, 1137, 2599, 2900]. **Bounded-Deletion** [3591, 2900]. **Bounding** [3318, 252]. **Bounds** [4007, 2346, 1466, 2420, 802, 1755, 2351]. **Box** [3513, 4310, 3261, 4076, 3548, 3947, 2446, 2757, 2988, 376, 3100, 3035, 2728, 3888]. **boxes** [677]. **BP** [3391]. **BP-Tree** [3391]. **BRAD** [3415, 3816]. **Brain** [3415]. **Branch** [3948, 4027, 1246]. **Branch-&-Bound** [3948]. **branching** [1504]. **breach** [343]. **bread** [809]. **Breadcrumb** [2714]. **Breaking** [2502, 1190, 3724]. **Breathing** [3553]. **Bregman** [171]. **BrewER** [3500]. **bricolage** [1223]. **Bridging** [1703, 3313, 4374, 3496, 4077, 4330, 3874, 3647, 3372, 3610, 4223, 1785, 255, 1054, 2296]. **Brighthouse** [109]. **bring** [2629]. **Bringing** [3430, 3258, 4375, 3502, 1128]. **broadband** [1145]. **browser** [1578, 3095]. **browsing** [1794, 1537]. **BSMA** [1148]. **BTrim** [1975]. **Bubble** [4167, 1890]. **Buckaroo** [4352]. **Buckle** [2175]. **Budget** [4238, 3810, 2628, 3161, 4061, 2553, 2866, 2453]. **Budget-Aware** [4238, 4061]. **Budget-Conscious** [3161, 2453]. **budget-constrained** [2866]. **budgeted** [2370]. **Buffer** [4021, 4291, 1283, 723, 2130]. **Buffer-Aware** [4021]. **bufferpool** [467]. **Bug** [3472]. **Bugs** [4154, 3770, 3685, 4134, 3121]. **Build** [3360, 329, 533]. **Building** [341, 3531, 288, 2467, 729, 581, 1077, 1199, 3527, 414, 3444, 2563, 1363, 3468, 4112, 1069, 1552, 1606, 1885, 2760, 1964]. **buildings** [1574]. **Built** [3657, 3829, 2175]. **Built-in** [3657]. **Bulk** [3410, 986]. **bumps** [2310]. **bundling** [1271]. **Burst** [3818, 4266]. **burstiness** [642]. **Bursting** [3148, 2258].

bursts [437]. **bursty** [10, 1164]. **bushy** [1132, 1914]. **Business** [3524, 4275, 4129, 3232, 650, 2248, 1126, 424, 1618, 759, 1364, 144, 1149]. **Busy** [4321]. **Butterfly** [3593, 2643, 4084, 2822, 2124, 2995]. **Butterfly-core** [2643]. **BW** [290]. **by-target** [2688]. **BYO** [3717]. **Bypass** [3419]. **ByShard** [2660]. **Byte** [3324, 3655, 2693]. **Byte-Addressable** [3324, 3655]. **ByteDance** [3433, 3060, 3431, 3829, 3826, 3437, 3068]. **ByteGNN** [2901]. **ByteGraph** [3060]. **ByteHTAP** [3068]. **Bytes** [3938]. **Byzantine** [2941, 2660, 2909]. **Bztree** [1876].

C [1794, 143, 2246, 726, 3344, 100]. **C-DEM** [143]. **C-explorer** [1794]. **C-Store** [726]. **C5** [3163]. **Cabinet** [4073]. **Cache** [3780, 3233, 1476, 2093, 4177, 3208, 3904, 3592, 3542, 4186, 4344, 3944, 3610, 708, 1514, 2677, 2969, 2102, 1249, 1330, 707, 201, 852, 2830, 53, 1297, 2373, 2404, 2865, 3012]. **Cache-aware** [2093, 3012]. **Cache-Efficient** [3592]. **cache-enabled** [2969, 2830]. **cache-friendly** [1330]. **cache/storage** [852]. **Caching** [4185, 3700, 1824, 3113, 1859, 1954, 46, 1768, 2788, 506, 3008, 2006, 2650, 1931, 995]. **Caerus** [3578]. **CaJaDE** [3088]. **calculation** [556]. **Calculators** [4373]. **Calibrating** [3989, 1057]. **Calibration** [3747, 3412]. **CALM** [3230]. **CALYPSO** [2529]. **came** [1629]. **camera** [2186]. **campus** [2702]. **Can** [4154, 3635, 719, 4324, 3323, 4316, 3208, 3987, 3220, 3205, 3848, 3540, 3565, 3994, 3089, 1685]. **candidate** [1107]. **CANDS** [1233]. **canned** [2641]. **canonical** [2298]. **can't** [2185]. **CAP** [1134]. **capability** [662]. **Capacity** [4059, 1020, 3017, 1862]. **CAPE** [2177]. **CAPER** [2142]. **Capri** [142]. **Capri/MR** [142]. **CAPRIO** [2195]. **Capture** [4236, 1778]. **Capturing** [2523, 2396, 3632, 598]. **car** [2656]. **car-hailing** [2656]. **Carbon** [4302]. **Cardinality** [3975, 2864, 1872, 3048, 4006, 3383, 3558, 3967, 3280, 4242, 3599, 4121, 3671, 3592, 3477, 4192, 4152, 4013, 253, 2925, 1957, 2639, 2838, 252, 2644, 2813, 39, 2812, 2615, 2710, 2283, 2488, 2603]. **care** [876, 481]. **CareDB** [477]. **Caribou** [1729]. **Carlo** [2810]. **CARMI** [3012]. **CarStream** [1776]. **carte** [971]. **cartography** [954]. **cascades** [773]. **Case** [4332, 3354, 3941, 3310, 3297, 3378, 3517, 1886, 2847, 1086, 2346, 2398, 2164, 1232, 1714, 1966, 1959, 1301, 346, 2575, 3164, 1082, 1326, 1702]. **Cases** [3831, 3865, 878]. **Cassandra** [1290, 1960, 3064]. **Castor** [1608]. **CAT** [3086]. **Catalog** [4161]. **catalogs** [547]. **Catalyst** [3542]. **Catch** [2746]. **Catcher** [3904]. **CatDB** [4161]. **Categorical** [3648]. **categorization** [2350]. **category** [2697]. **CatSQL** [3281]. **Causal** [1955, 3977, 4262, 3366, 4108, 3944, 1812]. **Causality** [1185, 515, 3138]. **CausalMesh** [3944]. **cause** [2211]. **caused** [2461]. **Causes** [4053, 1290, 2347]. **CBench** [2709, 2590]. **CCBench** [2477]. **CD** [4277]. **CDAS** [659]. **CDB** [1982]. **CDI** [3061]. **CDI-E** [3061]. **CDSBen** [3437]. **CEDA** [3477]. **cedar** [4002]. **Cell** [3330, 2146]. **Cell-Wide** [3330]. **cells** [692]. **center** [2093, 2097, 1069, 1826, 2375]. **Centered** [3386, 3633]. **centers** [100, 53]. **Central** [3440, 3405]. **Centrality** [3226, 3796, 1456, 2579]. **Centric** [3512, 4231, 4161, 3761, 4192, 1390, 775, 1346, 920, 1167, 679, 744, 1173, 1659, 1372, 1217, 1499, 2585]. **centroid** [623]. **CEP** [306]. **Cerebro** [2550, 2703, 2417]. **CERES** [1916]. **CERTA** [3100]. **Certain** [3267, 1032, 355, 2096, 2503, 1317]. **CERTEM** [3100]. **Certus** [2089]. **CFDs** [1938]. **CGgraph** [3649]. **CGM** [2662]. **CGPTuner** [2596]. **Chain**

[3292, 2270, 2951, 2668, 2828]. **ChainDash** [3499]. **chaining** [1473]. **chains** [1190, 409]. **challenge** [100]. **Challenges** [3640, 4364, 777, 3476, 1964, 3465, 716, 158, 3468, 3861, 3464, 3459, 2220, 1534, 3135, 3131, 146, 770, 2467, 1079, 2778, 3127, 2795, 1186, 2247, 3129, 1614, 3130, 1041, 2222, 720, 1866, 1616, 1820, 2464, 1948]. **Challenging** [647]. **Chameleon** [3804, 3968]. **Chance** [4281]. **Change** [3245, 2048, 1345, 866, 110]. **Changes** [4270, 4018, 3285, 969]. **Changing** [3280, 1122, 1603]. **Channel** [3557, 16, 2611]. **characteristics** [771]. **Characterization** [3576, 2878]. **Characterizing** [3607, 1579, 2647]. **charging** [2920, 205, 3014]. **Charting** [2567]. **Charts** [3879]. **Chase** [3382, 348, 3040, 1485, 1207, 251]. **Chasing** [2063, 3263, 2924, 1209]. **Chat** [3927]. **ChatTS** [4142]. **Cheap** [1538, 2675]. **Cheaper** [4107]. **Check** [3415]. **Checker** [4061, 3916]. **Checking** [3888, 3261, 1485, 2028, 31, 1809, 2175, 2210, 2303, 2103, 2262, 1053]. **checkpoint** [275, 2683]. **Checkpointing** [4284]. **Checkpoints** [4044, 2936, 2907]. **Checks** [4311, 2043]. **cheetah** [386, 469]. **CHEF** [2675]. **cherry** [2330, 2811, 3082]. **cherry-picked** [2330, 2811, 3082]. **CHEX** [2907]. **chi** [2381, 660, 1932]. **chi-square** [660]. **chi-squared** [2381]. **Chimera** [4214, 3986, 1139]. **Chimp** [3041]. **chip** [202]. **Chiplet** [3801]. **Chiplet-Based** [3801]. **ChiSeL** [2381]. **Choice** [3863]. **Choices** [4182, 2816, 3090]. **choke** [2349]. **Choose** [3425, 2794]. **Choosing** [2239]. **Chorus** [3701]. **Chronos** [766]. **ChronosDB** [1928]. **Chukonu** [2874]. **CI** [4277, 2216]. **CI/CD** [4277]. **circle** [1118]. **citation** [1793, 2095]. **CiteDB** [1793]. **CIVET** [3703]. **Civilizer** [2214]. **Claim** [3998, 4329, 2442]. **ClaimBuster** [1809]. **ClaimIt** [4329]. **CLAMShell** [1483]. **Clash** [1444]. **Class** [234, 4014, 3260, 4248, 2681, 626, 1763, 3690]. **Class-based** [234]. **Classification** [3381, 2069, 873, 3120, 538, 89, 3111, 2719, 1139, 2806]. **Classifier** [4031, 1130]. **Classifiers** [3412, 3674, 2503, 2711, 268, 1862]. **Clauses** [3967]. **Clay** [1665]. **clean** [2262, 738]. **Clean4TSDB** [3901]. **Cleaning** [3900, 60, 3901, 3962, 2069, 3720, 3912, 3197, 3958, 1511, 1480, 1455, 1395, 1408, 1612, 712, 2172, 899, 148, 2194, 831, 1751, 1421, 1338, 1531, 2509, 2727, 2722, 1477, 75, 2312, 2686, 2675, 3084, 1716]. **Cleanits** [2172]. **CleanM** [1751]. **CLEar** [1164]. **click** [35, 692]. **ClickHouse** [3824]. **clicklogs** [185]. **Client** [4308, 2791, 1714, 2448]. **client-side** [2448]. **clients** [472]. **Clique** [3822, 3980, 3725, 3765, 4223, 2454, 2444, 1757, 2379, 2447]. **cliques** [2528, 571]. **cloaking** [1798]. **Clocks** [3212, 4095]. **cloned** [3163]. **Closed** [4174, 3177, 415]. **closest** [1475]. **Closing** [112]. **Cloud** [3141, 3430, 3375, 3823, 3844, 3803, 4214, 4308, 4201, 4304, 3415, 3874, 3846, 3702, 2247, 3129, 3453, 3527, 3515, 3828, 3431, 3310, 3865, 4053, 3455, 4315, 3665, 3791, 3447, 3808, 4295, 3445, 3854, 3829, 3485, 3450, 4247, 3816, 4371, 3437, 3288, 4323, 4296, 4252, 3851, 3272, 507, 775, 2770, 1176, 587, 2446, 1366, 859, 3076, 1970, 1192, 1972, 2815, 3070, 2252, 555, 3061, 778, 3107, 1769, 2011, 2012, 3193, 3079, 1465, 2780, 478, 953, 191, 1556, 2612, 1214, 1454, 134, 632, 2347, 1030, 2086, 2576, 1517, 381, 1968, 2239, 2130, 619, 385, 656, 1659, 1784, 2211, 3034, 447, 2087, 3074, 736, 2650, 1890, 3073, 2230, 2635, 3166]. **Cloud** [977, 4296, 4297]. **cloud-based** [1784]. **cloud-cost** [2815]. **Cloud-Native** [4214, 3846, 3702, 3828, 3431, 3455, 3447, 3485, 3450, 3437, 4296, 2247, 2211, 3074]. **cloud-scale** [859]. **cloud/crowd** [2011]. **Cloudburst** [2437]. **ClouDiA** [789]. **CloudJump** [3070]. **Cloudkit** [1875]. **Cloudmatcher** [2011]. **Clouds**

[3635, 4119, 1968, 2057, 789]. **CloudVista** [736]. **Cloudy** [4281, 478]. **Clue** [1672]. **Clue-based** [1672]. **Clues** [3788]. **Cluster** [3536, 4076, 3363, 3448, 3809, 1292, 503, 2266, 208, 1177, 713, 1580, 736, 2970]. **Cluster-and-Generalize** [3809]. **cluster-based** [2970]. **Cluster-Explorer** [4076]. **Clustera** [6]. **Clustered** [3616, 542]. **Clustering** [3492, 1870, 4332, 4266, 1864, 3405, 4264, 3262, 3296, 4076, 3510, 3772, 3760, 4028, 903, 3178, 2097, 11, 1261, 623, 2090, 277, 3039, 222, 2971, 151, 89, 1641, 276, 2015, 1414, 2667, 1539, 605, 2265, 2496, 2894, 1853, 2313, 2828, 3029, 230, 1764]. **ClusterJoin** [1097]. **Clusters** [4060, 654, 365, 2758, 2414, 979, 2236, 2281, 3003, 151, 351, 405, 402, 2769, 716, 1322, 582]. **CM** [3483]. **CM-Explorer** [3483]. **CMixing** [3908]. **CNN** [3094, 2199]. **CNNs** [4041]. **Co** [4178, 3649, 3961, 3565, 3588, 3735, 1927, 2129, 1654, 853, 1249, 2971, 3020]. **co-clustering** [2971]. **Co-Coordinators** [3735]. **Co-Design** [3961, 3020]. **Co-Designing** [4178]. **Co-Learning** [3565]. **co-located** [1927]. **Co-Movement** [3588, 2129, 1654]. **co-processing** [853, 1249]. **Co-processor** [3649]. **coalition** [2190]. **Coalitions** [3794]. **Coarse** [4236, 3443, 2515]. **Coarse-Grain** [4236]. **Coarse-Grained** [3443, 2515]. **Coarsening** [3956]. **coasting** [1721]. **CockroachDB** [3092]. **Coconut** [1885]. **CoDA** [503]. **CODD** [1422]. **Code** [3516, 3326, 4336, 4312, 1100, 3830, 3518, 2704, 2389, 2860, 3030, 2482, 2556]. **Codebooks** [4241]. **Codes** [3973, 2369, 2389, 806]. **codesign** [2528]. **codex** [3132, 3030]. **CodexDB** [3030]. **Coding** [3403, 2161, 2976]. **CODS** [475]. **coefficient** [1917]. **Coefficients** [4155, 49]. **CoHadoop** [562]. **Coherence** [4186, 4147]. **coherent** [1771]. **cohesive** [786]. **Cohesiveness** [3408]. **Cohort** [3730, 1628].

CohortNet [3730]. **cohorts** [2181]. **Coin** [3908]. **CoLA** [4259]. **cold** [976, 1538, 1085, 2406]. **Collaboration** [3718, 4259]. **collaborations** [2803]. **Collaborative** [1399, 3843, 2012, 1585, 3495, 3468, 4043, 3812, 4210, 3907, 3851, 483, 495, 3124, 761, 135, 59, 2003]. **Collapse** [3956]. **Collapse-Based** [3956]. **Collecting** [3251, 2460, 1783]. **Collection** [3643, 3504, 3361, 4057, 864, 2662, 2272, 2464]. **Collections** [3810, 78, 2462, 203, 334, 594, 488, 1976, 2713, 1260]. **Collective** [3304, 2572, 1216, 530]. **collectors** [2083]. **Cologne** [635]. **color** [2161, 3975]. **Colorful** [3357]. **Coloring** [3975, 3226, 1860]. **Colt** [1778]. **Column** [336, 4144, 3295, 3767, 3715, 548, 3853, 154, 3265, 3540, 1565, 1409, 2261, 2425, 967, 614, 838, 1027, 563, 2067, 1546, 952, 742, 475, 648, 1344, 1631, 869, 412]. **Column-Based** [3295]. **Column-oriented** [336, 548]. **Column-store** [154, 2067, 742, 1344]. **column-stores** [614, 838, 563, 1631]. **Columnar** [2967, 2682, 3554, 2329, 2525, 1189, 1663]. **ColumnML** [2067]. **columns** [2638]. **Combating** [2223]. **combination** [2425, 3045]. **combinations** [1027]. **Combining** [3750, 1179, 4164, 1477, 2164, 1910, 2976]. **Comdb2** [1567]. **Comes** [3467]. **COMET** [2875]. **coming** [2774]. **Comments** [628]. **commerce** [2270, 2190, 1055]. **Commit** [3311, 2256, 3193, 2541, 834]. **Commitment** [3735, 2086, 2576, 2357]. **committed** [2653]. **Committee** [4305]. **Commodity** [3649, 3017, 468]. **Common** [3526, 3396, 3307, 1368, 1554]. **commonalities** [1544]. **Commonsense** [3469, 3675]. **Communication** [3990, 3798, 3628, 2969, 1277, 2649, 2956]. **Communication-Avoiding** [3798, 2956]. **Communication-Efficient** [3990, 2969]. **Communities** [3737, 4072, 1913, 2119, 1794, 340, 2447].

Community [3203, 4187, 3359, 3737, 4183, 4236, 3680, 3633, 4071, 169, 4111, 1307, 3711, 3204, 3320, 1737, 2413, 3141, 1696, 1927, 128, 2643, 1479, 1555, 1687, 2324, 2562, 1475, 1707, 2386, 2984, 2902, 23, 132, 1264, 1106, 918, 2667, 3023, 1289, 2599]. **Community-driven** [169]. **community-oriented** [23, 132]. **community-sensed** [918]. **CommunityAF** [3359]. **Compact** [3330, 4124, 3158, 3703, 2521, 822]. **Compacting** [691]. **Compaction** [1294, 3767, 2362, 2659]. **compactions** [3042]. **Compactly** [3501]. **companies** [878]. **Comparative** [310, 1731, 1509, 3605, 2770, 2109, 1457, 2813, 2034, 2972, 2625]. **COMPARE** [2676]. **Comparing** [133, 2156, 172]. **Comparison** [4055, 4026, 4254, 4016, 1831, 2620, 153, 1096, 809, 2104, 2855, 790, 490, 1334, 2676, 1669, 701, 2640]. **comparisons** [380]. **compartmentalization** [2658]. **competing** [2572]. **competition** [1457]. **Competitive** [4210, 2531, 549, 245]. **Competitors** [3303]. **Compilation** [1590, 613, 2704, 354, 2990, 116, 1835, 2499, 2317, 890]. **Compiled** [3228, 2081, 2037, 2491]. **compiler** [308, 189]. **Compiling** [3258, 1346, 559, 2782]. **Complementarity** [4226, 1457]. **Complete** [939, 4327, 1688]. **completely** [3125]. **Completeness** [3393, 2773, 2147]. **Completion** [4229, 2041, 1090]. **Complex** [3781, 4374, 1822, 4236, 4335, 4190, 4327, 3913, 751, 399, 3595, 3916, 9, 1607, 864, 2957, 2269, 2848, 368, 460, 2176, 1630, 1362, 3188, 1935, 1934, 1661, 744, 2459, 2856, 2020, 2291, 481, 567, 2688, 2654, 3009, 3842]. **Complex-Path** [3842]. **Complexities** [3980]. **Complexity** [3625, 3602, 668, 2869, 2919, 827, 836, 1467, 963, 670, 515, 988]. **complexity-optimized** [2869]. **compliance** [2881, 2577]. **Compliant** [2742, 2884]. **Component** [3757, 3605]. **Components** [3797, 1167]. **Composable** [206, 3368, 3869]. **compose** [1202]. **Composition** [3609, 70]. **Compositional** [3371]. **Compound** [4079, 4342]. **Comprehensible** [2610]. **Comprehensive** [3699, 2516, 4183, 4130, 4275, 897, 4063, 4193, 3721, 3316, 3637, 3971, 880, 2864, 2709, 3105, 2944, 2640, 2946, 2233]. **Compress** [4241]. **Compressed** [3426, 1532, 1339, 4140, 2346, 2974, 272, 2693, 2342, 178, 44, 1948]. **Compressibility** [3696]. **compressing** [1260]. **Compression** [3326, 4103, 3650, 4306, 4202, 3926, 3651, 3217, 3226, 569, 2338, 3298, 4146, 3758, 3733, 4217, 4243, 3710, 3604, 553, 292, 2452, 1912, 3058, 2434, 2516, 1963, 400, 462, 2329, 2875, 2578, 3041, 2690, 72, 1848, 1059, 1699, 2482, 2055, 3803]. **compression-enabled** [2434]. **Computable** [3349]. **Computation** [3980, 3530, 3380, 4208, 3277, 4234, 3796, 3845, 3757, 4020, 3748, 2574, 2832, 1304, 1135, 3173, 2706, 3108, 6, 2458, 1215, 3022, 2101, 560, 407, 528, 529, 36, 2410, 679, 630, 1000, 2439, 1848, 2188, 802, 1639, 2052, 1659, 1554, 3050, 1001, 1217, 1712, 1329]. **Computational** [2028, 3553, 3277, 3552, 4038, 1122, 2960, 1053]. **computationally** [2519]. **computationally-efficient** [2519]. **Computations** [3222, 4131, 1131, 1541, 574, 1795, 2105, 2582, 1836, 2887]. **Compute** [4338, 3828, 2874]. **Compute-Memory-Storage** [3828]. **computer** [1506]. **Computers** [3491, 1188]. **Computing** [1035, 3196, 2798, 1643, 1094, 3528, 785, 3302, 415, 3970, 3944, 507, 699, 881, 2266, 1529, 1979, 1689, 1214, 2942, 1245, 2025, 82, 345, 1204, 1487, 1253, 254]. **concave** [2035]. **Concentrated** [3154]. **Concept** [3305, 3603, 1778, 967, 503, 1387]. **concept-preserving** [1387]. **concepts** [2424, 127, 390]. **Conceptual** [3278]. **Concise** [312, 1107]. **Conclusions** [4037]. **Concurrency** [4178, 4270, 627, 4068, 3367, 4137, 4199, 4170, 2731, 2054, 1323, 3021, 2084, 1674, 3163, 597, 1447, 694, 1121, 2477, 1632, 1693, 1239, 1931, 1494]. **Concurrency-Aware** [4178, 3367]. **Concurrent** [3802, 4230, 4075, 4279, 1869, 1093, 3490, 3995, 193, 1983, 2831, 832, 1344, 856, 2948, 2364]. **Condensation** [3982]. **Conditional** [4346, 3580, 131, 33]. **Conditioning** [28, 455]. **conditions** [2596, 34, 1352]. **conductance** [1449]. **Confidence** [3571, 1257, 1800, 2420]. **confidence-aware** [1257, 1800]. **Confidential** [3560, 3240, 1176]. **Confidentiality** [3560, 3024, 1006, 2355]. **confidentiality-preserving** [2355]. **Configuration** [4166, 3161, 3583, 2989, 1271, 274, 139, 3033, 2583, 935]. **Configurations** [3294, 2446, 2866, 2596, 2354, 1478, 1348]. **Conflict** [4104, 4132, 1805, 2290]. **Conflict-Aware** [4132]. **conflicting** [216, 1882, 618]. **conflicts** [331, 201]. **ConfluxDB** [1087]. **Conformal** [4162]. **Conformance** [4029]. **ConfSeer** [1379]. **Confucius** [473]. **confused** [2443]. **congestion** [2732]. **Conjunctive** [1889, 1112, 1467, 2501, 1546, 2376]. **Connected** [3643, 3204, 1573, 1788, 2929]. **Connectionlens** [2008]. **connections** [2008]. **ConnectIt** [2534]. **Connectivity** [4032, 3729, 242, 2895, 3057, 2534, 2509, 1203]. **connectivity-based** [2895]. **Connector** [3504]. **ConnectorX** [3036]. **conquer** [1287]. **conquer-based** [1287]. **Conscious** [3161, 219, 2114, 2453]. **Consensus** [4123, 3212, 3865, 4018, 4073, 2372, 2456, 2086, 2576]. **Consensus-Group** [4018]. **consent** [2835]. **consequences** [712]. **Consequential** [3894]. **Conservative** [3538]. **consideration** [1515]. **Consistency** [191, 2256, 3068, 1955, 1290, 431, 362, 2231, 2448]. **Consistent** [3233, 3769, 1564, 241, 3450, 3387, 2071, 1772, 1032, 2025, 533, 3183]. **consolidation** [470, 183]. **consortia** [3050]. **Consortium** [3560, 2731]. **Constant** [2237, 3817, 2481]. **Constrained** [4, 11, 3564, 3775, 3710, 3753, 2118, 3738, 2866, 2934, 3054, 2819, 2526, 2296, 2321, 1974, 1633, 2859, 2553]. **Constraining** [4305]. **Constraint** [1905, 3962, 4104, 3974, 4040, 3511, 3551, 3694, 3216, 1858, 522, 2634, 560, 635, 2844, 3045, 3072, 2873, 3184, 546, 1060, 2077]. **constraint-aware** [2634]. **Constraint-Based** [3962, 1905]. **constraint-solving** [3072]. **Constraints** [4334, 3257, 4222, 4120, 4132, 163, 1280, 357, 1549, 2269, 699, 958, 41, 1719, 148, 348, 377, 3188, 350, 1020, 2419, 1207, 1321, 3045, 2383, 2282, 1091, 1511, 448, 2257, 77, 3186]. **construct** [1427]. **Constructing** [1227, 2659, 927]. **Construction** [4104, 3685, 4134, 4100, 3315, 864, 1534, 1647, 1944, 2537, 226, 1838, 1448, 576, 2219, 1840, 1636, 1333, 1400, 3102, 3012]. **consultation** [2802]. **consumer** [1659]. **consumer-centric** [1659]. **Consumption** [3584, 3876, 4081, 2724, 702, 100]. **contact** [643, 2608]. **contact-based** [2608]. **contagions** [2608]. **Containerized** [3049]. **Containers** [3717]. **containment** [366, 2193]. **contemporary** [1236]. **contended** [2308, 1632]. **content** [495, 2028, 552, 649, 391, 706, 1406, 2753, 716, 1559, 55, 3013, 2380]. **Contention** [1883, 4199, 1844, 1121, 1489]. **Contention-aware** [1883]. **Context** [881, 4276, 4168, 4344, 949, 514, 1175, 477, 3088, 2402, 1128, 2860]. **Context-Aware** [4344, 881, 514]. **ContextCache** [4344]. **contextual** [2596, 2394]. **Contextualized** [3295, 2389]. **Contextualizing** [3162]. **Continents** [3635]. **Continual** [3747]. **Continuous** [859, 2914, 4348, 1072, 4064, 3538, 2427, 4132, 263, 3753, 454, 872, 2023, 2192, 397, 2588, 150, 2915, 2992, 2127, 2698, 3069, 2450, 1233, 1244]. **Continuously** [2423, 265, 269]. **ConTPL** [2023]. **Contract** [3734]. **Contrastive** [3929, 4052].

contributing [2200]. **contribution** [2833]. **Contributions** [3699, 3999]. **Control** [4270, 4068, 4205, 4137, 3875, 4199, 4170, 1410, 2054, 1323, 2148, 3021, 627, 2084, 1674, 3163, 1877, 597, 1447, 1887, 1932, 2436, 2994, 694, 68, 2477, 1632, 1693, 1239, 1931, 1494]. **Controllable** [4000]. **Controlled** [3845]. **Controlling** [584, 2023]. **Controls** [3830]. **ContTune** [3538]. **Conundrum** [4242]. **convergence** [205]. **conversational** [3086]. **Conversion** [4293]. **convex** [1267, 3015, 141]. **Convincing** [3998, 4329]. **Convolutional** [3407, 3218, 2853, 2649]. **convoy** [2110]. **convoys** [88]. **cookies** [2781]. **Cooperation** [3608, 188]. **Cooperative** [186, 723, 3167]. **CoopStore** [2418]. **Coordinated** [224, 4078]. **Coordination** [1237, 3247, 4286, 1977, 485, 3027, 1030, 670, 2043]. **Coordinators** [3735]. **CoPhy** [543]. **coprocessing** [944]. **copying** [217, 460, 499]. **CORADD** [438]. **CORAL** [3907]. **Core** [3321, 3357, 3743, 3148, 3755, 3254, 3757, 661, 1009, 107, 2643, 1453, 285, 577, 201, 2289, 2542, 2606, 1869, 51, 1711, 815, 2911, 2551, 1712, 254, 2957, 3380, 3766, 2926]. **CORE-Sketch** [3380]. **CoreKG** [1986]. **Cores** [3653, 4065, 1671, 2256, 2243, 1632, 1239, 2645]. **Coreset** [4031]. **Coresets** [3168]. **Cornet** [3508, 3364]. **Cornus** [3193]. **CoroBase** [2517]. **CoroGraph** [3610]. **Coroutine** [3961, 2517]. **Coroutine-Based** [3961]. **coroutine-oriented** [2517]. **coroutines** [1961, 1852]. **corpora** [1675, 1247, 1337]. **correct** [320]. **CorrectDB** [823]. **correction** [2402]. **correctly** [3042]. **correctness** [1376]. **Correlated** [3976, 1021, 2489, 2912, 2371, 833, 611, 2882, 843]. **correlating** [347]. **Correlation** [3530, 272, 2077, 99, 1024, 438, 151, 972, 2068, 2667, 2196]. **correlation-aware** [1024]. **Correlations** [3540, 603, 689, 513, 1536, 2904, 67, 388, 1230, 96]. **correlative** [3123, 2963]. **Cosine** [2815]. **Cosmos** [4298, 2771]. **Cost** [3780, 3313, 4365, 4310, 4126, 3026, 2068, 4141, 4001, 3957, 4119, 3807, 4298, 3829, 3559, 2046, 4016, 3149, 4323, 3718, 2574, 1376, 440, 2248, 2094, 2269, 1192, 2815, 561, 1635, 2988, 2042, 2612, 2951, 1136, 100, 1193, 960, 802, 2285, 2484, 753, 843, 1060, 1494, 595, 2635, 3012]. **cost-aware** [440]. **Cost-Based** [3149, 561, 2484, 3012]. **Cost-Effective** [4126, 4298, 3829, 3559, 2046, 1136, 595, 2635]. **Cost-Efficient** [3807, 2068, 2248]. **cost-optimal** [2612, 1060]. **Cost-Optimized** [4119]. **cost-saving** [1193]. **CostgreSQL** [1590]. **costing** [2962]. **costs** [441, 2624, 1736]. **Couchbase** [2249, 3075]. **Could** [3494, 2253]. **Count** [3822, 4157, 1947]. **count-of-counts** [1947]. **Counter** [985, 3539]. **counterbalancing** [2177]. **Counterfactual** [3794, 3894, 2610, 2618]. **Counterfactuals** [3196]. **Countering** [3641]. **Counting** [3593, 3668, 4165, 3691, 4084, 788, 989, 4115, 4215, 2161, 188, 2501, 2274, 2968, 2291, 1847, 2124, 2995, 2817, 2560, 2441, 2822]. **countries** [1038]. **counts** [241, 1947, 717]. **coupled** [1977, 853, 1249]. **cove** [2727]. **Coverage** [3804, 3819, 2056, 780, 2422]. **Covers** [3662, 1081, 2010]. **COVIZ** [2181]. **cow** [2786]. **CPU** [3693, 3374, 3867, 2348, 107, 2081, 3649, 1005, 853, 1249, 3608, 2760, 4023, 701, 2998, 3952, 938]. **CPU-GPU** [3867, 4023, 2998, 3952]. **CPU/GPU** [2760, 938]. **CPUs** [285, 577, 51, 2551]. **Cquirrel** [2698]. **crabbing** [2085]. **cracked** [563]. **Cracking** [4257, 3341, 614, 563, 1010]. **Cracking-Like** [3341]. **Crafted** [4373]. **Crafting** [3509]. **crawl** [101]. **crawlers** [649]. **crawling** [126, 665]. **Crazy** [3524, 1618]. **CRDT** [3230, 2888]. **CRDTs** [3991]. **create** [65]. **Creating** [2127, 245]. **Creation** [1814, 58, 1855]. **criteria** [1899]. **Critical** [4154, 3913, 4321, 2939, 2890]. **CRIUS** [519]. **Cross**

[3650, 3749, 3422, 3505, 3513, 2270, 3292, 3408, 4300, 4013, 3290, 4292, 4052, 1940, 2142, 727, 1106, 1914, 2363, 701, 1178]. **cross-application** [2142]. **Cross-chain** [2270]. **cross-comparison** [701]. **Cross-Database** [3513, 4013]. **Cross-Device** [3505]. **Cross-Domain** [3650, 4292, 2363]. **cross-industry** [727]. **Cross-Layer** [3408]. **cross-lingual** [1178]. **Cross-Modal** [3749]. **Cross-Platform** [4300, 1940]. **Cross-Shard** [3292]. **Cross-Silo** [3290]. **Crossbow** [2143]. **Crossing** [1786]. **Crossings** [4081]. **crossroads** [2224]. **crowd** [907, 1154, 1582, 2011, 837, 1981, 1982, 2350, 2593, 788, 1232, 1061, 617, 808, 1219]. **crowd-aided** [2350, 1219]. **crowd-aware** [2593]. **crowd-enabled** [617]. **crowd-powered** [1982, 1061]. **crowd-sourcing** [1232]. **Crowd4U** [744, 1585]. **CrowdER** [696]. **CrowdMiner** [907]. **crowds** [1483]. **Crowdsourced** [1503, 2069, 1759, 2443, 1863, 844]. **Crowdsourcing** [3247, 1098, 1275, 1615, 1162, 2440, 1309, 1941, 1408, 1434, 1362, 1585, 1697, 1815, 1800, 2951, 659, 744, 762, 1139, 1084, 1820, 696, 1262, 3112, 2046, 3167, 842, 1658, 1673]. **crowdsourcing-based** [1815]. **Cryptanalysis** [2623]. **Cryptocurrency** [3908]. **Cryptographically** [3549]. **Crystal** [2677]. **cSHB** [1339]. **CSR** [4077]. **CSV** [1525, 2411]. **CSV-like** [1525]. **cube** [3045, 322]. **Cubes** [3142]. **CUBIT** [3995]. **Cubrick** [1561]. **Cuckoo** [2479, 4198, 1912, 2277, 2078]. **culturomics** [1110]. **Cümülön** [1465, 1700]. **Curation** [3512, 4367]. **current** [1614]. **Curves** [3362, 3328, 3957]. **Cusp** [3528]. **custom** [469, 2893]. **customer** [1379, 876]. **Customizable** [2234, 3518, 1198]. **Customization** [4211, 1533]. **Customized** [3630]. **CUTTANA** [3966]. **CXL** [3831, 3736, 4196]. **CYADB** [2010]. **Cycle** [4327, 1974]. **Cycles** [4069, 1942]. **CyLog** [744]. **CyLog/Crowd4U** [744]. **CyNetDiff** [3909]. **Cypher** [2245].

D [338, 2779, 1700, 2926, 3743, 3331, 1506, 2098, 3732]. **D-Bot** [3732]. **D-core** [2926, 3743]. **D-Truss** [3331]. **D-Wave** [1506]. **D2** [936]. **D2P** [1295]. **D3** [3751]. **D3-GNN** [3751]. **DADER** [3106]. **DAFDiscover** [3805]. **DAG** [4340, 2367, 4108]. **DAGs** [628, 4047]. **DAHA** [3646]. **daily** [1406]. **Dalton** [3202]. **dampening** [2524]. **Dandelion** [4060]. **DAQ** [1298]. **Dark** [3526]. **DARKER** [3786]. **DARLING** [2848]. **DASH** [2099, 2345]. **Dashboard** [4327]. **Data** [3516, 3953, 4360, 3440, 3460, 3780, 3935, 3251, 3550, 3282, 4355, 3900, 3222, 4338, 1534, 3424, 3483, 261, 2657, 3747, 1709, 3902, 4219, 3252, 3512, 3650, 3611, 3523, 3530, 4143, 4358, 3214, 3531, 4026, 3688, 3144, 3640, 715, 3160, 3901, 3805, 3962, 331, 2024, 3774, 4094, 3422, 3804, 3209, 3295, 4224, 4161, 3267, 2401, 3416, 4374, 4245, 2326, 3353, 3923, 4325, 505, 4336, 3533, 4265, 4092, 3522, 4124, 3803, 1144, 4317, 332, 24, 3162, 3984, 4227, 3398, 3397, 3720, 4333, 3651, 714, 4330, 3879, 4264, 3293, 4275, 3217, 3142, 3428, 4260, 3707, 4079, 3701, 3458, 1683, 3236, 3889, 3250, 3608, 4185, 3373]. **Data** [3415, 3936, 3886, 4129, 2795, 4006, 4034, 3314, 3476, 2390, 2630, 2775, 3446, 3569, 3291, 3646, 4005, 3860, 3784, 4205, 4141, 3538, 4193, 4159, 3499, 3257, 3534, 4312, 4125, 4184, 3427, 3758, 236, 4316, 3310, 3208, 4299, 3695, 3806, 246, 3481, 511, 3912, 3719, 3597, 3220, 2222, 3865, 3740, 3856, 2331, 3940, 3830, 423, 1385, 1915, 3548, 3368, 3869, 3461, 3197, 3284, 4300, 4331, 3529, 3489, 3955, 1617, 3770, 3958, 4363, 3863, 4018, 3385, 3498, 3768, 3779, 4011, 3857, 3475, 3931, 3871, 4327, 3285, 3794, 4095, 4283, 3340, 3772, 4295, 3773, 4203, 3973, 4217, 3409, 4314, 1760, 3540, 3248, 3905, 4322, 3306, 2335, 3468, 3778, 3934].

Data
[3642, 3812, 4153, 4250, 4218, 4368, 4318, 4352, 4196, 2464, 3504, 3686, 4152, 3145, 3050, 3420, 3485, 3439, 4142, 3619, 3920, 3898, 4213, 4277, 3832, 3366, 3816, 3393, 3637, 4059, 3202, 3960, 3361, 3652, 3662, 4058, 3795, 4323, 4296, 4226, 4297, 4229, 3263, 3457, 3927, 4002, 3727, 3438, 4228, 4015, 3915, 3644, 3718, 4292, 3434, 3786, 3919, 1390, 1871, 1831, 491, 1480, 1535, 123, 2251, 867, 2072, 814, 740, 1778, 2759, 79, 507, 436, 775, 1940, 2471, 863, 454, 1376, 750, 1813, 1793, 501, 737, 1252, 976, 342, 1946, 2365, 1440, 1412, 3136, 1038, 1703, 877, 2093, 1054, 1525, 1455, 2468, 3047, 1859].
data
[3126, 352, 147, 1437, 3141, 2662, 2064, 2455, 297, 878, 2742, 1977, 871, 1143, 2179, 504, 900, 1395, 570, 329, 1900, 234, 2595, 1399, 2955, 281, 1668, 2048, 2248, 1611, 1589, 1777, 1538, 929, 886, 1157, 70, 365, 2146, 1901, 1970, 193, 430, 1160, 2023, 2244, 2729, 64, 2920, 103, 1792, 1753, 977, 2206, 2008, 2523, 3093, 2848, 2227, 1263, 317, 469, 727, 1730, 2234, 2426, 3068, 60, 2761, 2361, 95, 2672, 942, 339, 1547, 1408, 1524, 1612, 1720, 923, 206, 294, 104, 69, 152, 214, 433, 2195, 1652, 1635, 1222, 97, 629, 188, 555, 3061, 712, 2755, 461].
data [6, 2986, 920, 1042, 2027, 950, 1411, 1594, 2714, 153, 1261, 1893, 2172, 2489, 768, 216, 889, 1080, 1618, 2208, 1086, 828, 480, 899, 2050, 2292, 2961, 2766, 798, 1581, 902, 1085, 1394, 1821, 874, 562, 678, 343, 1766, 148, 131, 355, 836, 2403, 2155, 2587, 2701, 2352, 2144, 1566, 1306, 1069, 880, 1167, 2897, 924, 691, 2029, 3117, 1183, 3107, 3080, 1138, 2038, 1759, 3086, 2723, 2634, 831, 3120, 2102, 1072, 3010, 1751, 1822, 2457, 1088, 1864, 578, 1224, 3059, 2818, 898, 316, 623, 826, 1115, 2392, 1362, 1483, 1421, 26, 816, 882, 248, 1079, 1389, 1850, 1922, 2700, 500]. **data**
[2485, 2609, 2334, 2259, 949, 1367, 61, 1465, 1700, 2205, 2238, 2249, 677, 2022, 1470, 2577, 2786, 1114, 581, 690, 2549, 2158, 1049, 2780, 2210, 1402, 1071, 124, 2959, 1979, 1315, 2236, 2281, 3134, 2067, 2442, 1020, 916, 1102, 1533, 2943, 952, 805, 1811, 1796, 3127, 2910, 1458, 2529, 98, 921, 1606, 1885, 1207, 829, 2801, 2749, 755, 2627, 2032, 2784, 151, 1531, 2443, 2693, 599, 1386, 15, 1802, 777, 3075, 2223, 728, 3067, 3026, 724, 1123, 2288, 1826, 1152, 2616, 129, 997, 1257, 1174, 1031, 1186, 1083, 1448, 1268, 1643, 1622, 1488, 1651, 1574, 1825, 1722, 2068, 1887, 1980, 2445, 2525].
data [1116, 513, 398, 1067, 2422, 2039, 1384, 475, 659, 1536, 1558, 2431, 2580, 2716, 2746, 2836, 2788, 3124, 468, 1286, 134, 2197, 632, 1530, 2218, 1641, 662, 2080, 3018, 120, 1563, 3044, 1786, 2086, 2576, 2735, 717, 3056, 1190, 349, 2204, 3006, 1731, 2854, 679, 2030, 2649, 2904, 2427, 2543, 893, 1619, 1816, 744, 1041, 119, 1817, 276, 2522, 2722, 2756, 732, 2417, 2550, 1895, 2684, 176, 2385, 951, 1767, 2841, 919, 1721, 2474, 1725, 1419, 2747, 2268, 3139, 1909, 1952, 3181, 3085, 1790, 1478, 1988, 1657, 655, 2994, 2254, 844, 2740, 1884, 328, 3087, 1149, 318, 2629, 100, 1124]. **data**
[2771, 1477, 1057, 832, 1344, 1631, 2312, 1373, 2122, 2466, 1714, 720, 2041, 1938, 68, 1855, 3118, 2730, 966, 1728, 2255, 1830, 807, 2216, 2214, 2736, 2686, 913, 1959, 2449, 741, 3138, 2112, 1422, 2184, 2221, 1553, 716, 1812, 1013, 1994, 235, 918, 806, 2355, 1967, 169, 1414, 2737, 954, 1579, 3176, 1603, 2752, 2687, 150, 1755, 2626, 74, 1444, 769, 1400, 2156, 1666, 2676, 2962, 154, 887, 1128, 1664, 2213, 2880, 2262, 109, 2518, 1331, 53, 335, 337, 2307, 2767, 1616, 2033, 2472, 1122, 1180, 1791, 1184, 772, 1159, 65, 2115, 1318, 1602, 2584, 228, 13, 115].
data [839, 1540, 1740, 2896, 455, 879, 818, 1543, 2494, 3035, 3132, 803, 2899, 1626, 2058, 1450, 2960, 372, 2020, 2861, 30, 315, 701, 845, 1048, 1230, 1166, 1416, 1625, 1797, 2211, 2149, 2351, 2484, 2568, 2565, 3036, 3168, 2947, 3185, 3062, 3128, 2147, 135, 2785, 83, 2380, 3034, 87, 447, 1082, 1158, 1198, 2095, 1418, 1148, 2972, 1170, 1428, 286, 408, 736, 2191, 2083, 2460, 1878, 536, 796, 1137, 2151, 2539, 3102, 17, 243, 931, 1749, 2046, 2688,

2551, 1396, 2998, 2136, 2945, 1130, 2874, 822, 847, 1145, 2641, 2209, 633, 801, 96, 792, 970, 1194, 1074, 1171, 1776, 1716, 1948, 2201, 2297, 2375, 2556, 2625, 2680, 2654, 2973].
data [618, 1597, 1141, 1782, 1702, 1764, 2091, 1398, 2018, 739, 118, 759, 1808, 2214, 1438, 3927]. **data-** [1977, 1031]. **data-adaptive** [845]. **Data-Agnostic** [4152]. **data-analysis** [1041]. **Data-Aware** [4026, 3427, 2955, 2848, 3086]. **data-based** [578]. **Data-Catalog-Guided** [4161]. **Data-Centric** [4161, 920, 1167, 679, 744]. **data-cleaning** [1455, 831]. **data-completeness** [2147]. **Data-Dependent** [3719, 1042]. **Data-Driven** [3923, 3871, 3619, 3786, 1534, 2331, 1617, 3136, 1086, 2442, 1448, 1959, 2752, 2962, 1450, 3102, 2641]. **Data-Efficient** [3747, 3168]. **data-induced** [2281]. **data-integrating** [65]. **data-intensive** [2737, 2556]. **data-metadata** [24]. **Data-oriented** [423]. **Data-Parallel** [3222, 2326, 2352, 1268]. **data-quality-aware** [2880]. **data-sharing** [3050]. **Data-Skipping** [3409]. **data-structures** [1263]. **Database** [3831, 454, 3897, 3432, 4270, 3532, 3304, 4267, 4302, 2681, 3338, 3419, 4103, 3576, 4271, 3827, 3834, 4334, 302, 4154, 3823, 3844, 400, 3862, 3491, 2601, 4104, 3513, 3996, 4067, 3486, 3888, 3926, 3882, 4195, 3294, 3537, 3292, 4068, 4191, 3586, 340, 2287, 3421, 3221, 4110, 3536, 3689, 3344, 3885, 3846, 3702, 3736, 3399, 3828, 4343, 3287, 3820, 3257, 4291, 1563, 945, 2025, 330, 3300, 3609, 3853, 4053, 4369, 2878, 3495, 3443, 3229, 3210, 4018, 3681, 4003, 3447, 3685, 4134, 4282, 3472, 4220, 4269, 3836, 3807, 3470, 3939, 3620, 3448, 3450, 3837, 4305, 3790, 3268, 3327, 3960, 4013, 3437, 3583, 3797, 4237, 3543, 3732, 3606, 3698]. **database** [336, 2480, 2251, 2471, 661, 601, 2224, 2237, 1134, 410, 130, 1237, 2475, 3141, 2866, 1500, 467, 1192, 1972, 2720, 2623, 406, 895, 1569, 2545, 3002, 695, 2119, 2252, 1404, 63, 344, 1005, 1374, 995, 2797, 2847, 1939, 2208, 274, 982, 1523, 984, 1368, 2157, 1085, 892, 1118, 2398, 3021, 1205, 2723, 2891, 1768, 2473, 3063, 626, 1498, 2705, 3079, 2682, 1975, 614, 914, 474, 2517, 138, 2047, 2101, 58, 930, 1529, 1845, 2267, 2150, 438, 569, 3003, 767, 2415, 1111, 293, 713, 1613, 2760, 2936, 3110, 477, 1223, 1268, 1806, 1982, 2247, 2235, 2762, 3060, 2085, 2070, 824, 1436, 884, 137, 1993, 2228]. **database** [2409, 259, 3140, 1361, 2389, 1283, 2153, 1191, 1725, 3139, 2436, 1029, 2602, 2783, 1378, 3180, 1417, 1627, 2162, 2905, 519, 1316, 1867, 791, 1073, 3121, 2538, 1121, 932, 2189, 2884, 1010, 1567, 1095, 1665, 2739, 2010, 2339, 665, 868, 745, 2883, 3090, 346, 2575, 2583, 1188, 2960, 656, 2453, 1621, 1659, 1797, 2799, 3062, 2918, 2147, 2099, 856, 2498, 3074, 466, 753, 2909, 3066, 1429, 1660, 1931, 2160, 2889, 2230, 1624, 1978, 2469, 2635, 2946, 244, 726]. **Database-as-a-Service** [3532, 3536, 1005, 1768, 3003, 1283]. **Database-Backed** [3399, 3257]. **database-powered** [767]. **database-style** [601]. **Database-support** [454]. **Databases** [1439, 3959, 3342, 3259, 4158, 4249, 3901, 4339, 3258, 3966, 3825, 4310, 3657, 3261, 4021, 4214, 4079, 3463, 3350, 3467, 3453, 3527, 3381, 3207, 3938, 3940, 4262, 3931, 4357, 3445, 3933, 3861, 3895, 4371, 3317, 3614, 3927, 4093, 3617, 4286, 2, 2881, 308, 2056, 1075, 3089, 239, 1502, 1662, 1575, 752, 675, 999, 2071, 1684, 1420, 29, 1962, 303, 784, 341, 1087, 956, 333, 2554, 3070, 413, 663, 2113, 555, 1025, 3099, 2677, 764, 2275, 613, 2981, 146, 691, 404, 1769, 3086, 170, 1274, 580, 1032, 2245, 2705, 143, 42, 3174, 1723, 1788, 3098, 88, 669, 1537, 2300, 2180, 5, 396]. **databases** [512, 28, 812, 2835, 577, 597, 201, 790, 212, 972, 1227, 2138, 2525, 2777, 3129, 3041, 2422, 475, 1101, 1147, 416, 2218, 2541, 2347, 1578, 834, 1517, 1185, 1835, 1823, 73,

927, 975, 439, 362, 1045, 1592, 237, 187, 142, 2017, 1189, 1829, 66, 510, 722, 1481, 508, 905, 771, 617, 67, 435, 1557, 158, 2893, 2676, 2563, 1512, 2130, 2477, 962, 367, 965, 2564, 1883, 710, 564, 3036, 3164, 411, 2151, 223, 698, 1587, 639, 1494, 1623, 1055, 3032, 2978, 62]. **DataCell** [742]. **datacenter** [1894, 834, 694, 1510]. **Datacenters** [1188]. **Dataflow** [3751, 4033, 3507, 3493, 1376, 2770, 1235, 288, 2316, 2121, 2021, 2964, 3183]. **dataflows** [1886, 2114, 2391, 1998]. **dataframe** [2862, 2408, 2863]. **Dataframes** [3707, 2880, 2666, 3036, 3925]. **DataGarage** [468]. **DatAgent** [2735]. **DataHub** [1399]. **dataless** [1422]. **Datalignment** [2193]. **datalog** [1907, 1340, 2193, 2092, 992, 2052, 1353, 2335, 3535, 3497, 3945, 4349, 4014, 909]. **datalog-based** [1907, 992, 3497]. **DataLoom** [3919]. **Datamap** [4031]. **Datamap-Driven** [4031]. **DataPlay** [749]. **DataPrice** [3915]. **DataRinse** [3516]. **Dataset** [3789, 3295, 3982, 3285, 1336, 2729, 1504, 3000, 2003, 2647]. **Datasets** [4263, 3879, 3520, 3592, 3921, 3915, 1607, 603, 2414, 2356, 1382, 1600, 397, 2509, 2838, 338, 369, 1544, 1232, 2331, 390, 1057, 2355, 643, 2098, 1637, 2581]. **dataspaces** [145]. **DataSpread** [1420]. **Datastore** [3841, 533]. **datastores** [1294, 694]. **Datastorm** [1977]. **Datastorm-FE** [1977]. **DataTweener** [1811]. **DataXRay** [1416]. **dates** [916]. **dating** [1195]. **Davos** [2752]. **Dawn** [3793]. **DAX** [800]. **DB** [1424, 1088, 201, 1826, 662, 3931, 3518, 4298, 3898, 1403]. **DB-GPT** [3898]. **DB-MAGS** [3931]. **DB2** [292, 280, 869, 466, 2171]. **Db2une** [3833]. **DBAs** [612]. **DBG** [3891]. **DBG-PT** [3891]. **DBLP** [295]. **DBMind** [2717]. **DBMS** [247, 4319, 944, 300, 3941, 3193, 2864, 1924, 3033, 3110, 3564, 800, 4029, 3806, 1381, 2808, 1568, 3444, 1165, 2239, 2099, 286, 2650, 2998, 3952, 1928, 2776, 3125, 3095, 4321].

DBMS-Based [3564]. **DBMS-oriented** [2808]. **DBMSes** [3513]. **DBMSs** [162, 3277, 3396, 2991, 4134, 3478, 595, 2375]. **DBO** [205]. **DBOS** [2808]. **DBPecker** [4342]. **DBPubs** [130]. **DBSCAN** [1641]. **DBSeer** [1429]. **DBSP** [3286]. **DBTagger** [2546]. **DBToaster** [308, 653]. **DBWipes** [738]. **DC** [2356]. **DDS** [3792]. **DDSketch** [2241]. **De-REdundancy** [3766]. **dead** [2786]. **Deadline** [4102]. **Deadline-Oriented** [4102]. **Deadlock** [4237]. **dealer** [2718, 2558]. **Dealing** [339, 3852]. **deals** [2270]. **debate** [2033]. **debuggable** [2316]. **Debugger** [3891]. **Debugging** [2714, 4033, 1787, 2461, 622, 2836, 3121, 3100]. **Decade** [3467, 2470, 2771]. **December** [1582]. **decentralization** [2941]. **Decentralized** [3513, 2951, 4184, 3343, 4137, 3240, 3735, 3543, 3612, 3002, 2529, 2956, 1090]. **Decibel** [1504]. **decide** [2471]. **Decider** [3814]. **deciding** [1945]. **Decision** [4195, 3381, 3562, 3509, 1977, 697, 2545, 2797, 1086, 764, 3010, 1734, 2752]. **decision-flow** [1977]. **Decision-Making** [4195]. **Decisions** [3894, 2320]. **DECK** [4284]. **Declarative** [3873, 3788, 278, 2101, 2002, 3428, 3877, 3198, 3363, 2687, 3470, 1582, 1640, 1571, 94, 1167, 2814, 2301, 2014, 1806, 635, 1601, 1190, 744, 762, 1971, 993]. **Declaratively** [4131]. **Declaratively-Specified** [4131]. **DecLog** [3543]. **Deco** [762]. **Decoding** [3326, 4263]. **Decomposable** [3656]. **Decomposed** [2690, 3498]. **Decomposing** [4044]. **Decomposition** [3321, 4131, 3271, 3948, 3743, 4127, 3764, 3673, 2895, 2388, 2329, 1453, 2515, 2655, 2926, 2606, 2916, 2863, 815, 2851, 640, 2952, 1495, 2859, 1937]. **decompositions** [1267]. **Deconstructed** [4128]. **Decoupled** [3016, 3334, 4240, 1912]. **Dedicating** [3413]. **Dedoop** [734]. **Deducing** [2096, 3312]. **Deduplicated**

[4149, 4326]. **deduplication** [1524, 734, 2894, 2978]. **Deep** [3833, 4350, 3635, 4117, 2809, 2842, 498, 3463, 3936, 3471, 2487, 2445, 3819, 3396, 3392, 3597, 3599, 2679, 3248, 3239, 3201, 3854, 4107, 3620, 3464, 2283, 3899, 3652, 2794, 2587, 2508, 2814, 2875, 2143, 2693, 3048, 1887, 2235, 2716, 2639, 2167, 2417, 2550, 2199, 2709, 298, 741, 2520, 2363, 493, 2899, 2428, 2464, 2551, 2625, 2978, 1197, 787, 101]. **Deep-RL** [3819]. **DeepDB** [2334]. **DeepDive** [1333]. **DeepEverest** [2814]. **DeepJoin** [3351]. **Deeply** [3882]. **DeepSketch** [3899]. **DeepTEA** [2922]. **DeepVQL** [3471]. **Defective** [3980]. **Defense** [3697]. **Defenses** [4358]. **DeFiHap** [2699]. **Defined** [3462, 3122, 2981, 287, 2577, 729, 2844, 2893, 818, 1170]. **Definition** [626]. **defunctionalization** [898]. **degrees** [2416]. **Déjà** [4208]. **delay** [1908]. **Delayed** [4246]. **Delayed-Synchronization** [4246]. **delegated** [3050]. **Deletion** [4163, 3591, 2501, 963, 2900]. **Delhi** [1578]. **delimiter** [2307]. **delimiter-separated** [2307]. **delivery** [2286, 174]. **Delta** [4284, 4300, 308, 653, 679, 2888, 1020]. **delta-based** [679]. **delta-mutations** [2888]. **DeltaPQ** [2482]. **deluge** [296]. **Demand** [2333, 3500, 4149, 4326, 1770, 2802, 2923, 3034, 1356, 3644]. **Demand-aware** [2333]. **DemandClean** [4331]. **Demo** [3503, 2721, 739, 318, 3469, 3893]. **democratic** [128]. **Democratize** [4309]. **Democratizing** [3486, 3119, 2584]. **Demonstrating** [4341, 3482, 3878, 3086, 3120, 4317, 3518, 3517, 2709, 3105]. **Demonstration** [3487, 752, 2723, 3486, 4333, 4308, 3514, 1386, 2718, 3124, 4356, 4312, 4354, 2199, 3498, 3472, 2728, 3881, 305, 2715, 3914, 3920, 3898, 3123, 3896, 3488, 3916, 2712, 3092, 1813, 1412, 300, 1810, 902, 1394, 1397, 2726, 1583, 2700, 3116, 2022, 2738, 1808, 1995, 1815, 1981, 1811, 921, 755, 2744, 319, 2703, 2746, 925, 2730, 2016, 2189, 1400, 738, 1418, 1171, 1978]. **Demystifying** [3575]. **deniability** [1668]. **Denial** [4040, 4222, 3216, 1858, 958, 2383, 2282, 2873, 3184]. **DENOUNCER** [2711]. **Dense** [620, 3146, 654, 427, 2060, 1636, 2045, 517, 3175]. **Densest** [610, 3596, 3131, 4012, 4050, 4223, 2166, 3015, 2379]. **Density** [3638, 3943, 2979, 3211, 3764, 2604, 2695, 2869, 2846, 3091, 2258, 1864, 1834, 222, 3075, 1641, 582]. **density-based** [1641, 582]. **Density-optimized** [2979]. **Dependable** [39]. **dependence** [1901, 216, 1403]. **Dependencies** [3153, 4219, 3805, 4116, 4200, 4056, 4305, 3662, 673, 1900, 1485, 1515, 34, 131, 33, 218, 272, 2314, 1891, 2089, 349, 2994, 2312, 674, 988, 1688, 2382, 2147]. **Dependency** [3660, 3885, 357, 2276, 1287, 1314, 2686, 2159]. **dependency-driven** [2686]. **Dependent** [3669, 3719, 1042, 86, 2922, 1735, 90, 2132, 1060, 2118]. **depends** [2445]. **depict** [181]. **Deploy** [3740]. **Deployable** [3212]. **deployed** [2508]. **Deploying** [3277, 2796]. **Deployment** [1241, 2173, 2635, 789]. **deployments** [2248]. **Depth** [3724, 4050, 42, 382, 2104, 790, 2915, 1307, 2273]. **depth-first** [2273]. **derive** [1949]. **Descent** [3634, 2107, 1711]. **describing** [287, 437]. **description** [2764]. **Descriptions** [3807]. **desensitization** [3179]. **Design** [4207, 4271, 956, 2102, 1474, 3260, 2980, 3986, 3961, 4301, 4289, 1194, 2480, 2620, 1075, 1134, 4, 917, 2403, 1069, 2891, 2567, 569, 713, 1826, 2153, 3180, 519, 3118, 2659, 273, 2813, 2679, 2147, 2633, 3020, 1130, 2591]. **designer** [438]. **Designing** [4178, 2990, 4260, 3328, 3791, 879, 2805, 2815]. **Designs** [4279]. **DESIRE** [2970]. **desk** [1826]. **Destabilizers** [421]. **DesTeller** [894]. **destination** [1619, 894]. **DET-LSH** [3712]. **Detecting** [1535, 4154, 151, 2443, 3548, 3685, 4134, 2856, 3201, 4072, 3686, 3439, 4081, 2330, 2750, 2811, 2699, 2016, 320, 1130].

Detection [3305, 4341, 3570, 3818, 3568, 3631, 3253, 3271, 4090, 3199, 3870, 4040, 3694, 3864, 4354, 3479, 3584, 4171, 3219, 3768, 3506, 3425, 3472, 4025, 3981, 4105, 3920, 3579, 4058, 4237, 3206, 3603, 4259, 4052, 99, 926, 9, 220, 645, 2393, 2748, 2621, 3115, 1021, 1696, 2853, 2232, 190, 1129, 2129, 2906, 1292, 2258, 217, 460, 499, 828, 2592, 626, 1125, 2922, 277, 3116, 1468, 2738, 2692, 2000, 2386, 2267, 1935, 2314, 1015, 2711, 3082, 1106, 1577, 470, 2938, 3019, 2873, 1379, 1974, 2839, 1959, 2944, 2667, 2438, 2115, 2985, 1543, 2494, 2899, 1307, 102, 3109, 399, 1289, 3084, 2909, 428, 2136, 1716, 2394, 2290]. **detector** [3113]. **determination** [967]. **determinism** [346]. **Deterministic** [3734, 4068, 2085, 2342, 2409, 3005, 1073]. **detouring** [484]. **Deuteronomy** [1447]. **developed** [1038]. **Developers** [4319]. **Developing** [763, 1763, 1697]. **development** [1169, 17]. **developments** [1186]. **Deviation** [3380, 2651]. **Device** [3747, 3505, 471]. **Devices** [3294, 200, 1538, 964, 2212, 915, 847]. **DEX** [3739]. **Dexter** [1451]. **DfAnalyzer** [2021]. **DGFIndex** [1136]. **Dhalion** [2013, 1781]. **DHive** [3493]. **DIADEM** [1205]. **DIADS** [303]. **Diagnosing** [2347, 3977, 4089]. **Diagnosis** [4342, 3732, 303, 2267, 1416]. **diagram** [92, 90]. **diagrams** [108, 2825, 449]. **Dial** [3256, 941]. **Dial-a-Ride** [3256]. **Diamond** [3785]. **DICE** [1179, 2736]. **did** [2253]. **didn't** [1827]. **DIDS** [3709]. **Dietcoin** [2212]. **Diff** [4114, 2072]. **Difference** [4239, 4024, 4114, 326, 516]. **differences** [2554]. **Different** [4199, 2384]. **differentiable** [2807]. **Differential** [3251, 4094, 1367, 3756, 3660, 1614, 3227, 3406, 3303, 3779, 3771, 3939, 3317, 3361, 2662, 2987, 948, 2123, 2646, 2665, 2524, 1295, 2965, 1874, 804, 2089, 615, 684, 1031, 2718, 2746, 2558, 2870, 1681, 1925, 2399, 2628, 2977, 2478, 1798, 2191, 2460, 2513, 685, 686, 2293].

Differentially [3308, 3634, 3397, 2549, 1105, 1947, 3262, 3208, 3695, 3229, 3529, 3773, 3484, 3682, 3855, 3051, 2064, 2794, 2657, 2023, 2720, 2284, 2634, 1474, 431, 1320, 1583, 2943, 2141, 1174, 3006, 1057, 996, 2622, 2889, 781]. **differentially-maintained** [3051]. **differentially-private** [1057]. **Differentiate** [4118]. **differentiation** [196]. **difficulty** [1301]. **Diffusion** [3570, 3909, 2531, 1457, 947]. **Digital** [3581, 874, 296]. **DigitHist** [1755]. **Digraph** [3659]. **Dilemma** [3553]. **DILI** [3332]. **Dima** [1804]. **dimension** [2048, 1667, 2122]. **Dimensional** [1692, 4026, 3962, 4264, 3142, 3356, 4006, 4039, 3567, 3619, 3315, 3434, 1902, 2107, 3, 2489, 924, 2060, 2943, 151, 735, 1558, 1925, 276, 2466, 1460, 971, 2671, 1950, 1763, 1221, 1625, 2482, 3175, 179, 2191, 2513, 2309]. **Dimensions** [3296, 1764, 586, 1228]. **DIMMs** [3275]. **DimmStore** [2150]. **DimmWitted** [1117]. **DINOMO** [3157]. **dinosaurs** [330]. **Direct** [3636, 4352]. **Directed** [3680, 3331, 2926, 2273]. **Direction** [858, 1225]. **direction-based** [1225]. **Direction-preserving** [858]. **Directional** [4088, 4209, 2546]. **directions** [2475, 2795, 537]. **directions-based** [537]. **directories** [266]. **Dirichlet** [1514]. **Dirty** [3805]. **disadvantages** [1073]. **disaggregate** [1126]. **Disaggregated** [3968, 4304, 3157, 3990, 3739, 4274, 3626, 4186, 3792, 3165]. **Disaggregation** [3828, 3193, 3164, 2375, 2635, 4371]. **disagreements** [2098]. **disambiguating** [413]. **disassociation** [651]. **disaster** [2365]. **DisC** [780]. **Discharges** [3201]. **disciples** [473]. **Disciplines** [4374]. **disclosure** [341]. **DiscoPG** [3103]. **Discover** [3879]. **Discovered** [4222]. **discoveries** [2424]. **Discovering** [2001, 1502, 2595, 95, 958, 3688, 2921, 3146, 816, 4353, 972, 221, 760, 3993, 4056, 851, 119, 1984, 618]. **Discovery**

[4054, 4360, 1900, 3730, 4346, 3351, 3422, 3295, 3880, 4130, 4118, 4227, 88, 3701, 3660, 4034, 4116, 3587, 3461, 3744, 2282, 3216, 4367, 2257, 3809, 4050, 4223, 1480, 654, 118, 1234, 2425, 1858, 3103, 1901, 2108, 2729, 2411, 2195, 217, 2166, 3131, 2133, 602, 1434, 1759, 2276, 1630, 503, 1027, 2700, 1891, 766, 1257, 1882, 160, 402, 464, 2904, 1987, 2331, 1287, 1314, 1451, 2736, 2045, 2159, 1128, 1688, 2382, 965, 517, 3184, 412, 786, 1472]. **discrepancy** [2592]. **Discrimination** [3393]. **discussion** [778]. **Discussions** [3932]. **Disjoint** [3687, 2098]. **Disjunctive** [3859]. **Disk** [4291, 3215, 242, 3021, 380, 2932, 821, 862, 2511]. **Disk-Based** [4291, 3215, 3021, 380, 2932, 821]. **disk-I** [862]. **disk-I/O** [862]. **disk-resident** [242]. **DISKs** [756]. **disordered** [359]. **dispatch** [1898]. **dispatching** [2656]. **DISPERS** [2197]. **Display** [4268]. **Disrupt** [3416]. **disruption** [1617]. **disruptive** [1826]. **Dissecting** [3483]. **dissection** [1545]. **dissemination** [1020]. **dissimilarity** [780]. **Distance** [4026, 3670, 560, 4023, 470, 3302, 3752, 4234, 1543, 3742, 2914, 153, 1311, 817, 2369, 1295, 1109, 1466, 2419, 2606, 2983, 556, 600, 1007, 589, 2494, 448, 606, 77, 3000, 172, 1686, 1028, 408, 244]. **Distance-Based** [3752, 470, 1543, 1295, 2494]. **Distance-constraint** [560]. **distance-generalized** [2606]. **Distance-join** [244]. **distance-related** [1311]. **Distances** [3231, 3318, 699, 1642, 974]. **distantly** [1916]. **DISTILL** [2962]. **Distillation** [4136]. **Distinct** [3668, 4048, 241, 2827]. **distortion** [712]. **Distributed** [3978, 3780, 1886, 1671, 3945, 540, 3252, 3656, 3834, 1524, 4249, 3218, 3311, 1943, 1099, 3289, 4060, 4083, 3751, 3966, 3825, 2260, 2819, 3578, 4117, 2582, 2121, 3274, 3291, 3538, 2926, 1361, 506, 516, 2159, 4289, 992, 4011, 3798, 4095, 3836, 3905, 4062, 207, 4342, 1752, 3861, 3448, 4277, 3563, 3970, 2929, 3202, 3742, 2441, 2625, 3269, 3735, 3839, 4194, 4237, 4172, 783, 4286, 1831, 2480, 50, 1294, 9, 2365, 1921, 2742, 2094, 1135, 1789, 1954, 1972, 1772, 964, 1391, 1569, 2129, 2426, 3002, 1044, 2779, 681, 2148, 2352, 2868, 857, 1072, 2065, 2305, 826, 1277, 1674, 2266, 2114, 1634, 2238, 1562, 1729, 2101]. **distributed** [1857, 2002, 124, 1747, 140, 485, 2910, 2792, 1111, 2185, 48, 1646, 1267, 290, 1887, 3060, 3027, 635, 800, 2242, 2197, 1245, 1530, 1677, 1993, 2541, 756, 1560, 1425, 1030, 1932, 2025, 830, 1347, 2830, 144, 655, 1799, 2139, 1733, 2189, 941, 993, 1095, 1348, 1258, 868, 2053, 646, 1804, 2111, 1242, 1602, 1669, 227, 2020, 2211, 2511, 3164, 2894, 2952, 1170, 1653, 1998, 1217, 1233, 1487, 3066, 49, 1931, 1145, 2591, 1928, 1685, 2976, 801, 164, 1342, 1528, 1253, 463, 2091, 632]. **Distributed-Memory** [3218]. **Distribution** [3789, 835, 4143, 250, 3332, 3771, 3047, 1635, 2063, 2435, 2975, 49, 1637]. **Distribution-Aware** [3789, 3047, 2063, 1637]. **Distribution-based** [835]. **Distribution-Driven** [3332]. **distribution-key** [2435]. **distributional** [2985]. **distributions** [2684, 589, 833]. **DITIR** [1789]. **DITIS** [3905]. **Diva** [4255]. **Dive** [3396]. **divergence** [171]. **divergent** [2740]. **Diverse** [3892, 3373, 3876, 1255, 841, 127, 1694, 2447]. **diversification** [551, 827, 780, 906]. **Diversified** [959, 3052, 2001, 2680]. **Diversifying** [666, 1892]. **DiversiNews** [3876]. **Diversity** [3621, 1011, 3511, 3551, 4331, 877, 2853, 1667, 1309, 780, 968, 1262]. **diversity-based** [1309]. **diversity-driven** [2853]. **Divide** [1287]. **diving** [867]. **DL** [2909]. **DLBD** [3472]. **DLCR** [2934]. **DLRover** [3854]. **DLRover-RM** [3854]. **dmapply** [1560]. **DNA** [2554, 3310]. **DNN** [2458, 2820, 2490, 3017, 3564, 2543]. **DNN-based** [2490]. **Do** [2446, 3323, 3648, 4295]. **DObjects** [124]. **DobLIX** [4258]. **DocDB** [4343]. **DocETL**

[4190]. **DOCS** [1658]. **Doctopus** [4238]. **Document** [4271, 4343, 3370, 4190, 2076, 2967, 311, 203, 1413, 2246, 946, 3072, 2888, 168, 1300, 164, 1948]. **DocumentDB** [1365]. **Documents** [4238, 969, 489, 127, 1359, 523, 2547, 487, 2561, 40, 492]. **Doing** [2647]. **Domain** [3650, 4124, 1882, 946, 3477, 4292, 1785, 1814, 47, 394, 2842, 2331, 1557, 2363, 3106, 3185, 1658, 1551]. **Domain-aware** [1882, 1658]. **domain-specific** [1814, 1557]. **Domains** [4090, 2632, 451]. **Dominance** [3666]. **dominant** [1292]. **domination** [2527]. **done** [1535, 740, 2253]. **Don't** [708, 3803, 2994, 1714]. **DOP** [3903]. **DOP-SQL** [3903]. **DoppelGanger** [3885]. **doppioDB** [2180]. **Doppler** [3076]. **Doquet** [3529]. **DORIAN** [3118]. **DortDB** [4330]. **Dotori** [3283]. **Double** [3709]. **doubling** [1667, 1109]. **DoveDB** [3470]. **Down** [3724, 985, 248, 1402, 933, 2502]. **downsampling** [2647]. **DP** [3548]. **DP-PQD** [3548]. **DPDS** [3093]. **DPSAaS** [2191]. **DPSUR** [3634]. **DPSynthesizer** [1174]. **DPT** [1320]. **DPTree** [2293]. **DPU** [3792]. **DPU-Optimized** [3792]. **DPXPlain** [3172, 3484]. **DQDF** [2880]. **DQM** [1720]. **DRAM** [2607, 2589]. **dream** [2783, 328, 1277]. **Dremel** [1103, 369, 2470]. **Drift** [3305, 3774, 2438]. **drill** [1402]. **drill-down** [1402]. **DrillBeyond** [759]. **Driven** [3354, 3923, 4118, 4031, 3332, 3280, 3871, 3999, 3619, 4237, 3786, 2694, 987, 3136, 1143, 1534, 2853, 1709, 344, 2797, 1086, 2243, 2779, 2133, 3120, 1707, 2902, 2442, 2066, 1448, 2775, 1168, 1840, 2331, 1617, 2686, 1959, 1553, 180, 169, 617, 2752, 2962, 1450, 2743, 3102, 17, 2641, 1171, 2173, 2696, 2764, 4197]. **driven-graph** [2902]. **Drivers** [3617]. **Drives** [3553, 2300, 446, 596]. **Driving** [3482, 3820, 3797, 2783, 3180, 2717]. **Drosophila** [143]. **Drug** [3880]. **DSB** [2797]. **Dscaler** [1624]. **DSON** [2888]. **DTGraph** [3873]. **DTW** [239, 699]. **Dual** [4258, 3986, 3722, 2636]. **Dual-Balanced** [3722]. **Dual-Objective** [4258, 2636]. **DuckDB** [4350, 3083, 3502]. **DuckDB-wasm** [3083]. **DuckPGQ** [3502]. **DumpKV** [4057]. **duplicate** [220, 828, 277, 2314, 102]. **Duplicates** [3648, 1847]. **Durability** [3954]. **Durable** [4078, 2038, 3063]. **during** [1328, 3545, 388]. **DVote** [4305]. **Dwarfs** [157]. **DXPoint** [2340]. **DyHealth** [3071]. **DynaHB** [3798]. **Dynamic** [3959, 4233, 3057, 3577, 3643, 3818, 4032, 3805, 4255, 2105, 3253, 3357, 3623, 3751, 4230, 3558, 3697, 3961, 4010, 3678, 453, 1542, 4206, 3443, 2397, 2317, 3798, 53, 3331, 3667, 3712, 2380, 3204, 3602, 3714, 3960, 4113, 3544, 4012, 3764, 3748, 3600, 3334, 62, 3603, 654, 653, 3051, 1738, 359, 2934, 2656, 1043, 2566, 217, 2346, 1306, 1842, 1125, 1456, 1497, 1700, 2980, 2386, 1706, 1818, 222, 307, 2663, 2542, 1101, 1147, 1836, 2606, 1200, 1879, 338, 1914, 2588, 1572, 2306, 237, 1974, 2559, 2708, 16, 1994, 1843, 1293, 3016, 3023, 845, 1632, 1695, 856, 3074, 1211, 2273, 1860, 1244, 2652, 2865, 3029, 2581, 3071, 936, 2970]. **Dynamically** [4312, 4073, 2491]. **Dynamicity** [3194]. **dynamics** [163, 1697]. **Dynamization** [3759].

e-commerce [2190, 1055]. **E-store** [1242]. **eADR** [2898]. **eADR-enabled** [2898]. **eager** [259]. **EagleTree** [917]. **Early** [3631, 3880, 4080, 658, 4061, 1679, 2053]. **Early-Stopping** [4061]. **earth** [767, 589, 3000, 1028, 408]. **earthquake** [1959]. **Ease.ml** [2014, 1880, 2216]. **Ease.ml/ci** [2216]. **Ease.ml/meter** [2216]. **Easy** [4315, 103, 735, 905, 912]. **EasyAD** [4354]. **EasyDR** [3084]. **EasyTicket** [125]. **ECC** [1495]. **economic** [2183, 716]. **Economical** [3452, 3067, 736]. **ecosystem** [3089]. **Ecosystems** [4069, 886, 2774]. **Ed** [77]. **Ed-Join** [77]. **EDA4SUM** [3087]. **Edelweiss** [1044]. **Edge** [3253, 4308, 3865, 2913, 620, 964, 2895, 2012, 2508, 2260, 1497, 2942, 1923, 2687, 2573, 3013, 1847, 2447]. **Edge-based** [2913]. **Edge-Cloud** [3865]. **edge-oriented** [1497]. **EdgeDIPN** [2508]. **edges** [1377]. **Edit** [3670, 3302, 4234, 2419, 600, 448, 77, 172, 1686]. **edit-distance** [448]. **editing** [355]. **education** [3136, 2786, 3090]. **EEG** [2244]. **effect** [1289, 2375]. **Effective** [3965, 3424, 1901, 3574, 1555, 1687, 2324, 4236, 3842, 2322, 3974, 4126, 2386, 2984, 3322, 3659, 4216, 4044, 4179, 3999, 1688, 4025, 3355, 4298, 3418, 1058, 1633, 3829, 3417, 3559, 4247, 1860, 3664, 3029, 4194, 3971, 413, 2090, 2922, 1697, 2089, 129, 1116, 1136, 2402, 1030, 2086, 2576, 2854, 2110, 2435, 158, 1655, 1002, 1645, 2428, 408, 2046, 595, 970, 2635, 3071, 704]. **Effectively** [2430, 270, 1003]. **Efficiencies** [3444]. **Efficiency** [4103, 3716, 953, 3969, 3234, 3826, 3610, 233, 2499, 2496, 2373, 2680]. **Efficient** [986, 3535, 553, 799, 4256, 570, 29, 292, 2370, 1858, 1954, 3593, 3747, 2108, 551, 195, 3173, 3822, 3656, 2927, 3299, 3749, 4278, 107, 1833, 682, 198, 450, 1963, 4026, 3235, 3962, 768, 3311, 2540, 3668, 4339, 4231, 2166, 4211, 3776, 3267, 3799, 3462, 4091, 2163, 3353, 3623, 3589, 4225, 649, 3533, 4324, 86, 3761, 4165, 334, 1911, 2090, 4236, 3842, 4230, 1944, 2858, 3657, 4075, 3261, 3974, 3651, 4208, 2158, 3270, 3401, 3707, 3813, 1710, 1838, 812, 1935, 4185, 2415, 1891, 3660, 3322, 4007, 1312, 3314, 841, 2289, 2350, 2942, 3274, 3436, 3301, 4005, 4116, 4200, 4216, 1218, 3672, 3633, 3713, 3957, 3990, 3694, 4133, 657, 2080]. **Efficient** [3348, 3743, 3653, 4088, 4084, 3723, 4157, 3678, 2854, 3200, 3982, 3806, 3296, 1917, 3908, 4033, 2306, 3744, 3443, 3567, 2968, 3955, 3599, 520, 2538, 476, 3858, 3400, 4155, 2355, 3346, 3866, 643, 3592, 1639, 4035, 3999, 638, 3410, 1248, 3628, 4269, 3355, 3755, 3807, 4244, 3964, 3418, 1002, 849, 2428, 2947, 3573, 3796, 3731, 3711, 3950, 4250, 4062, 1853, 4239, 85, 264, 447, 1372, 3787, 3559, 810, 286, 408, 2995, 3204, 3710, 4215, 59, 4112, 2560, 2599, 3449, 3666, 4024, 4109, 4020, 428, 1269, 639, 3738, 3268, 3225, 4113, 451, 671, 1074, 1948, 2859, 3269, 3544, 3403, 3583, 3764, 3748, 4194, 4297, 3315, 820, 4240, 3765, 4223]. **Efficient** [4228, 4015, 4148, 2271, 3434, 3786, 123, 1176, 239, 1251, 2064, 2607, 161, 2248, 1304, 1912, 944, 365, 2930, 743, 103, 1620, 1266, 2919, 265, 266, 1155, 1514, 2348, 2934, 1351, 313, 2516, 1482, 1521, 1719, 902, 757, 2324, 2969, 1957, 2519, 2821, 2922, 2202, 594, 2322, 3098, 2060, 2386, 1706, 2875, 2885, 3033, 3189, 1441, 512, 1077, 1199, 734, 1034, 1942, 1832, 2298, 713, 528, 793, 1964, 2068, 2106, 2932, 2903, 3041, 2951, 575, 1384, 529, 1066, 2788, 2228, 1492, 3056, 576, 2492, 2527, 1100, 1360, 559, 2103, 3191, 2169, 1881, 2122, 960, 1830, 3187, 2112, 84, 32, 158, 1293, 449, 2851, 1322, 3170, 2215]. **efficient** [183, 2278, 2992, 2638, 1259, 1701, 2896, 1450, 2861, 448, 1920, 2277, 2351, 2568, 2789, 3168, 3175, 2894, 77, 2972, 1487, 1690, 3020, 1495, 1860, 2286, 2079, 938, 970, 1055, 1637, 1682, 1712, 2901, 704, 2970, 2018]. **Efficiently** [2631, 108, 3774, 2421, 3622, 3820, 559, 3775, 4065, 3881, 4112, 232, 3097, 2203, 2414, 1167, 2176, 81, 2406, 475, 1339, 1029, 2017, 2753, 496, 74, 2893, 2713, 1951, 1003]. **effort** [1661, 2041]. **Effortless** [1666]. **EFQ** [1415]. **Egalitarian** [3411]. **Ego** [1479, 4231]. **Ego-Centric** [4231]. **Ego-net** [1479]. **eHealth** [774]. **Eigen** [3453]. **eight** [1950]. **eight-dimensional** [1950]. **EinDecomp** [4131]. **Elastic** [4097, 3157, 3318, 3288, 2269, 3061, 851, 1095, 1242, 385, 3165, 2635]. **Elasticity** [4323, 555, 1796, 1111, 2598]. **ElasticNotebook** [3552]. **electric** [2783]. **ELEET** [3964]. **Elementary** [3956]. **elephant** [386, 2373]. **elephants** [705, 719, 806]. **Elf** [3298]. **elicitation** [1213]. **elide** [1332]. **Eliminating** [3758, 3613, 1189]. **elimination** [3108, 1289]. **Elle** [2504]. **Ellipsis** [3979]. **ELPIS** [3282].

emails [2131]. **Embed** [3434]. **embeddability** [974]. **Embedded** [2147, 1983, 2257, 1510]. **Embedding** [3878, 3289, 4191, 4079, 3877, 4035, 3556, 3242, 3947, 3666, 2906, 2877, 2855, 2830, 2774, 3081, 2429, 2311, 2486, 2364]. **embedding-based** [3081, 2429]. **Embeddings** [3607, 3654, 3333, 2570, 2721]. **EmbedX** [3434]. **Embellishing** [393]. **Ember** [2860]. **Embryo** [143]. **emerging** [1078]. **EMOGI** [2492]. **Empirical** [3648, 3554, 1505, 1165, 1693]. **empirically** [1881]. **Empowered** [4346, 3629, 4268, 3898]. **Empowering** [3730, 3894]. **empty** [980]. **empty-answer** [980]. **EmptyHeaded** [1785]. **Emulator** [4107]. **Enable** [3550, 1120, 3050]. **enabled** [2434, 2969, 1405, 2830, 3008, 1799, 617, 3164, 2898]. **Enabling** [3769, 3353, 2835, 2341, 3552, 2836, 3056, 3510, 2254, 325, 337, 4244, 3145, 3559, 184, 4286, 3046, 483, 1940, 601, 2637, 2248, 1311, 759, 2757, 124, 1315, 1637]. **encapsulating** [2081]. **EncChain** [3910]. **Enclave** [3837, 2563]. **enclave-native** [2563]. **encoded** [1123]. **encoders** [2878, 1058]. **Encoding** [3712, 2866, 1116, 3185, 2972]. **Encrypted** [3209, 3210, 3727, 929, 2623, 2162, 2355, 2563, 803, 2947, 3062]. **Encryption** [3402, 2109, 3058, 1963, 2791, 2162, 2734]. **End** [3897, 3902, 37, 3984, 4373, 3453, 4009, 1496, 2958, 2755, 1809, 2655, 2718, 2558, 338, 1909, 1988, 2938, 2285, 1685, 2734, 4009]. **End-to-End** [3897, 3902, 3984, 3453, 37, 2958, 1809, 2655, 2718, 2558, 1909, 1988, 2938, 2285, 4009]. **Endorse** [3998, 4329]. **EndoScope** [7]. **Endure** [2931]. **Energy** [351, 100, 4081, 2818, 2724, 713, 753]. **energy-efficient** [713]. **EnForce** [2724]. **engagement** [1712]. **Engine** [3433, 4334, 4339, 4317, 3997, 4208, 3937, 3942, 4184, 3208, 4299, 3510, 4273, 3377, 3791, 3829, 4297, 3612, 1299, 823, 752, 675, 8, 1977, 944, 1235, 2957, 1393, 2729, 2815, 1586, 2545, 2186, 2434, 2243, 2751, 2705, 521, 1277, 1922, 2517, 1533, 1811, 2141, 1570, 3075, 129, 111, 2548, 2879, 54, 2782, 3065, 1799, 1830, 3187, 2189, 125, 2767, 2964, 2642, 2453, 1920, 1089, 3074, 2633, 2874, 801, 3114]. **Engineering** [4144, 1436, 1191, 1169, 3061, 1592, 2619, 1745, 1996, 1188]. **Engines** [3273, 4166, 3951, 3323, 3586, 3496, 3736, 3446, 3858, 3372, 1831, 1844, 2081, 1077, 1199, 1296, 1191, 14, 1122, 2563, 1353, 2404]. **Enhance** [4187, 3804, 3908, 3642, 732]. **Enhanced** [284, 4123, 3996, 3969, 4268, 3979, 3340, 3265, 4218, 4142, 2662, 136, 2575, 2933, 322]. **Enhancing** [4103, 3910, 3778, 3692, 1697, 1136, 3104, 315]. **Enough** [4241, 3821, 1476, 1734, 1803]. **enriched** [2845]. **Enriching** [1331, 3876, 3777]. **enrichment** [3011, 2700, 1106, 2860, 2149]. **ENS** [886]. **Ensemble** [3760, 1551]. **ensembles** [1977, 2320, 2853, 2639, 289]. **Ensuring** [3450]. **Enter** [3706, 4325]. **Enterprise** [1186, 3754, 3832, 3024, 2465, 1970, 1404, 2176, 2225, 921, 82, 1189, 720, 125, 887, 2767, 315]. **enterprise-wide** [315]. **enthusiast** [1041]. **entities** [2694, 2681, 1043, 757, 2824, 2322, 458]. **Entity** [3424, 873, 770, 3676, 4157, 3279, 3414, 3911, 2923, 4357, 566, 457, 3565, 3852, 3333, 3500, 4156, 3988, 4147, 78, 1092, 987, 1462, 311, 203, 1943, 592, 1484, 1183, 404, 2011, 2217, 378, 2809, 2842, 1981, 1552, 1606, 310, 383, 2089, 2939, 2487, 2337, 2128, 1739, 358, 2940, 1509, 1988, 2636, 2174, 530, 1550, 1849, 2429, 3100, 2679, 3106, 1098, 1275, 696, 3192, 808, 2715, 886]. **entity-aware** [378]. **Entity/Relationship** [4357]. **Entries** [4078]. **enumerating** [1942]. **Enumeration** [3593, 3725, 3776, 3787, 3765, 2425, 2454, 1266, 2927, 2886, 985, 2819, 1305, 1646, 2296, 2139, 1113, 2376, 2691, 2817]. **EnviroMeter** [918]. **Environment**

[3640, 3353, 3347, 1169, 2660, 2538, 267, 164]. **Environmental** [4267]. **Environments** [3693, 3564, 3341, 654, 2224, 2942, 2857, 911, 582, 936]. **epiC** [1049]. **EPICGen** [2732]. **Epileptiform** [3201]. **Epistemic** [3406]. **Epoch** [2541]. **Epoch-based** [2541]. **Epoxy** [3373]. **EPPs** [1427]. **Equality** [3153, 1485, 2400]. **Equality-Generating** [3153]. **equi** [2857, 2691, 3488, 3371]. **equi-joins** [2857, 2691]. **EQUI-VOCAL** [3488, 3371]. **Equitable** [3420]. **Equivalence** [3814, 3916, 1737, 2134]. **Equivalences** [4253, 1945]. **Equivalent** [4134, 376]. **Era** [4092, 4304, 3527, 1821, 1183, 1822, 1186, 1190, 1012, 2255, 716, 576]. **Eraser** [3613]. **Erasing** [3298]. **Erasing-Based** [3298]. **Erasure** [4219, 3403, 806, 2976]. **Erebus** [3181]. **Erica** [3511]. **Errata** [1710, 1199, 2663, 2576, 1914, 2550, 1275, 3591]. **erroneous** [2750, 377]. **Error** [4341, 4146, 3348, 3700, 3456, 1416, 1137, 1455, 2651, 2906, 1521, 2875, 1838, 2942, 1698, 2342, 1225, 2402, 2241, 1925, 1755, 725, 2351, 2565, 3084, 810]. **Error-Bounded** [4146, 1137, 2875, 2942]. **Error-Tolerant** [3348, 1521, 810]. **Errors** [3231, 1535, 1720, 1981, 252]. **Esc** [4061]. **escrow** [3050]. **eSkyline** [929]. **Essential** [4079, 979]. **estimate** [1720, 205, 36]. **estimates** [2644]. **Estimating** [1834, 1664, 3389, 2608, 1649, 224, 1302, 2414, 2369]. **Estimation** [3822, 3699, 4143, 3214, 3975, 4106, 4006, 3383, 3723, 4157, 3967, 3280, 3599, 4155, 3151, 3671, 3477, 4192, 3682, 4115, 4048, 3658, 3194, 3664, 4013, 3591, 2925, 21, 2646, 1635, 2117, 2864, 1872, 2965, 604, 3048, 225, 541, 702, 2917, 1101, 2639, 2838, 252, 1910, 1917, 983, 1319, 2520, 2813, 1352, 1230, 2565, 2615, 2710, 1749, 2283, 588, 2900, 2603]. **estimations** [1335]. **Estimator** [3558, 4121, 2285, 2812, 2827, 2488]. **Estimators** [4242, 4048, 20]. **ETC** [3623]. **ethics** [2033]. **ETL** [916, 735, 2737, 1356].

ETO [2820]. **Euclidean** [1221]. **EVA** [3514]. **Evaluating** [2327, 2818, 1382, 2997, 2416, 4079, 4064, 2304, 4157, 358, 276, 1909, 3595, 133, 1455, 2468, 156, 906, 1183, 277, 2175, 2850, 3104, 87]. **Evaluation** [3305, 3535, 3699, 3412, 3629, 4045, 4130, 3260, 4160, 4180, 4110, 383, 3301, 4242, 3406, 4251, 3414, 4190, 3316, 3425, 4314, 4107, 3637, 3554, 3579, 1886, 2446, 2109, 1545, 956, 797, 1941, 1513, 424, 2512, 2050, 2292, 2140, 2163, 2102, 2864, 1674, 2544, 1851, 1056, 52, 2318, 310, 2433, 2939, 2070, 1713, 1245, 1505, 1731, 2983, 2709, 2590, 2120, 3019, 1314, 1073, 275, 3049, 2944, 1950, 435, 643, 2363, 2813, 2034, 2019, 1353, 2496, 606, 1372, 1693, 466, 2843, 2083, 1239, 451, 1503, 1678, 2652, 2946, 1510]. **Evaluations** [4037, 1410]. **Evaluator** [3889, 937]. **even** [386]. **Event** [3781, 4106, 509, 4335, 3455, 3443, 3303, 1256, 926, 9, 2957, 2192, 2848, 2950, 1630, 1822, 689, 1105, 1935, 1934, 1661, 2390, 119, 1841, 476, 324, 481, 567, 399, 2743, 2061, 3053]. **Events** [3371, 654, 1759, 2727, 849, 1164]. **Eventual** [3954, 3991]. **EvenTweet** [926]. **ever** [2220, 1809]. **Everest** [3555]. **Everyone** [3824, 896]. **Everything** [2037, 3696, 3448, 565]. **Evictions** [3410]. **evidence** [732]. **Evita** [94]. **Evolution** [3353, 3985, 2782, 3757, 4235, 891, 266, 63, 522, 1864, 3174, 330, 73, 2772, 887]. **Evolution-Aware** [3985]. **evolutionary** [885, 222]. **evolvable** [367]. **evolve** [489]. **Evolving** [4266, 3199, 4279, 2220, 1449, 475, 1542, 457]. **Evoschema** [4235]. **Exact** [253, 3380, 1899, 3666, 1482, 609, 2648, 2526, 2282, 590, 1705]. **exact-** [590]. **exactly** [698]. **Examination** [3831]. **Example** [3004, 3359, 2133, 3508, 3364, 4046, 1594, 1922, 2007, 1033, 2736, 1520, 2638, 1878]. **Example-Based** [3359, 3004, 2007]. **Example-driven** [2133]. **Examples** [4303, 3423, 3580, 213, 41, 2750, 1448, 634, 1849]. **Exathlon** [2738, 2692]. **Excalibur** [3228].

Excel [3951, 1129]. **exceptional** [1984]. **exchange** [24, 186, 349, 951, 318]. **executing** [1161]. **Execution** [4131, 3299, 3311, 3951, 3462, 3353, 4324, 3228, 3997, 4102, 3347, 3383, 3646, 3820, 3341, 3367, 3869, 3429, 3964, 4176, 1133, 3840, 3493, 4027, 3610, 2224, 871, 360, 2930, 1393, 93, 2758, 937, 31, 2243, 746, 2473, 2821, 2567, 1303, 2582, 1179, 512, 1282, 1384, 1492, 2857, 353, 423, 2499, 579, 3065, 3049, 3090, 1936, 856, 1206, 243, 1890, 2998]. **executions** [539]. **Exemplar** [1033, 3921]. **exemplars** [2829]. **eXist** [1403]. **eXist-db** [1403]. **Existential** [3382]. **existing** [1427, 1914]. **Expanded** [4147]. **Expanding** [3590, 716]. **Expansion** [4285, 542, 3001, 180, 617]. **eXpath** [4174]. **Expect** [3661]. **expectations** [455]. **expensive** [2670]. **experience** [288, 2760]. **Experiences** [4284, 2236, 3457, 1964]. **Experiment** [4010, 3845, 2918]. **Experimental** [3305, 1921, 3382, 3699, 3635, 4183, 3987, 3414, 3316, 3333, 3604, 3579, 1953, 1831, 2732, 2446, 1545, 797, 1941, 153, 2050, 2292, 1918, 2140, 1096, 1872, 2544, 1276, 1056, 2287, 2318, 1350, 2504, 2433, 1868, 1713, 1245, 2983, 1314, 3049, 990, 1669, 2640, 606, 2843, 2083, 1503, 1678, 1904, 2652, 2946, 1510]. **Experimentation** [3874, 1493]. **Experiments** [3589, 1324, 3001, 1540, 1272, 3009]. **experts** [1926]. **explain** [3120, 3925, 3285, 2098]. **Explain-Da-V** [3285]. **Explainability** [3144, 3427, 3392, 3081]. **Explainable** [4141, 4025, 2738, 2692, 2174, 2839]. **Explaining** [1547, 4019, 1801, 2533, 4310, 356, 2689, 4076, 1938, 1481, 3285, 4174, 3484, 592, 3088, 2177, 2200, 3181, 2016, 3172, 3100, 2098, 825]. **Explanation** [572, 3794, 3894, 4024, 2072, 1905, 2610, 3080, 1481, 761]. **Explanation-based** [572]. **explanation-ready** [1481]. **Explanations** [3878, 3407, 3925, 3196, 3094, 1226, 1185, 2199, 3138, 2618, 2728]. **Exploit** [3323, 413, 662]. **exploitation** [562]. **Exploiting** [877, 3153, 1485, 3375, 391, 3537, 1961, 1536, 732, 1273, 67, 745, 2731, 272, 1094, 596, 388]. **Explorable** [3929]. **Exploration** [3935, 4355, 4207, 3531, 3144, 3260, 3701, 4034, 3208, 3519, 130, 118, 3103, 1160, 1065, 2846, 1644, 136, 1411, 2207, 2403, 1598, 3010, 2217, 1583, 2047, 1402, 1315, 1600, 1168, 2746, 1527, 2219, 1642, 1725, 2747, 2181, 3087, 309, 2559, 298, 2368, 1666, 2813, 761, 2679, 2036, 1372, 2196, 2945, 1398, 55]. **Exploratory** [1591, 4292, 3698, 1593, 1151, 1788, 3098, 1328, 5, 2862, 1817, 919]. **Explore** [413, 1427, 759, 1578, 492]. **Explorer** [4076, 2007, 2015, 1790, 3483, 2695, 1794]. **explorers** [954, 1579]. **Exploring** [2048, 3330, 3408, 1816, 1592, 3703, 1336, 45, 917, 764, 505, 1864, 3059, 2943, 119, 760, 142, 487, 1428]. **Exponential** [3979]. **Expose** [4154, 4303]. **Exposing** [3294]. **exposure** [2727]. **express** [1560]. **Expression** [3706, 1590, 2060]. **Expressions** [3672, 1368, 1488, 1572, 353, 173]. **Expressive** [4098, 737, 709, 312, 488, 1666, 1487]. **Expressiveness** [988]. **ExRank** [1593]. **extend** [2981]. **Extended** [4168, 707, 1591]. **Extending** [2778, 3677, 523]. **Extensibility** [4110, 3806]. **Extensible** [4304, 4251, 3903, 2741, 1025, 1394, 1922, 1049, 2204]. **Extension** [3544, 2229]. **extensions** [467, 2594]. **Extensive** [3425, 1331]. **Extent** [3335]. **External** [3324, 3424, 3632, 97, 3080, 98]. **extinct** [330]. **Extract** [3339, 57, 114]. **Extract-Transform-Load** [3339]. **eXtracted** [492, 61]. **Extracting** [1359, 26, 390]. **Extraction** [846, 4238, 3238, 3349, 3877, 3443, 3243, 3400, 3459, 3714, 3393, 3438, 491, 814, 78, 297, 2465, 2678, 531, 984, 2937, 873, 391, 1851, 1407, 392, 1916, 3072, 1451, 2547, 955, 434, 135, 4340]. **extractions** [2561]. **ExtraV** [1771]. **Extreme** [2359, 1975, 2806]. **extremely** [2136]. **EXTRUCT** [493]. **Eye** [3426]. **eyes** [836].

F [1604]. **F1** [866, 1971, 868]. **F2** [4279]. **fabric** [2325]. **fabrics** [2467]. **FACE** [2812]. **Facebook** [867, 2761, 1377, 1969]. **Facebook-scale** [1377]. **Faceted** [4268]. **facilitate** [203]. **Facilitating** [2946, 766]. **Fact** [4261, 2028, 1144, 1809, 2175, 2210, 2303, 2103, 2262, 1053]. **fact-checking** [1809, 2210, 1053]. **Factor** [3955, 1863, 411]. **factorised** [752, 675, 999]. **factorization** [594, 2876, 2385, 807, 2691]. **factorized** [2754, 1604]. **factors** [1615]. **Facts** [4014, 1144, 1218, 1984]. **FactWatcher** [1144]. **FAD.js** [1777]. **FaDE** [4036]. **failure** [1972, 1258]. **failures** [626]. **Fainder** [3789]. **Fair** [2440, 3345, 4158, 3284, 3721, 3615, 3387, 2456, 2299, 3013, 258]. **FairEM360** [3911]. **Fairly** [2468]. **Fairness** [3804, 4204, 3719, 3863, 3414, 3159, 3188, 2299, 2684, 2619, 3176, 3186]. **Fairness-Aware** [3804, 2684]. **fake** [2223]. **Fakes** [4303]. **Falcon** [4123, 3615, 3352]. **False** [4222, 584, 1494]. **Family** [3974]. **Fanglue** [3509]. **Fangorn** [2758]. **far** [2780]. **FARGO** [3249]. **Fast** [3154, 3972, 527, 3789, 3598, 3143, 2604, 3025, 3638, 4233, 1129, 3649, 534, 2075, 609, 1647, 2555, 4325, 420, 3709, 3651, 4246, 1533, 1710, 2419, 577, 3885, 1214, 3274, 3291, 3691, 1650, 3990, 3647, 3381, 2435, 2873, 3216, 1756, 3733, 2139, 1636, 3824, 954, 1258, 2911, 2382, 2867, 4220, 1625, 2265, 3573, 4140, 3184, 1001, 532, 3000, 3753, 3735, 4073, 3249, 1476, 1859, 864, 2454, 2452, 1777, 2161, 2206, 1043, 1897, 1261, 705, 678, 2182, 1857, 998, 444, 794, 1441, 285, 2367, 3083, 1570, 728, 1722, 2525, 2917, 2690, 2639, 2409, 1527, 2241, 484, 1296, 362, 2110, 1378, 3005, 1829, 608, 1968, 955, 1491, 2605].

fast [3183, 202, 2675, 2136, 1660, 822, 2493, 2309, 1329, 2603]. **Faster** [3222, 1515, 3966, 1246, 1181, 3223, 4107, 1169, 1912, 2720, 707, 2801, 1786, 1360, 1279, 1952, 2044, 2076, 2277, 1310, 1983, 4279]. **FastFlow** [3248]. **FASTgres** [3417]. **FastLanes** [3326]. **FastMosaic** [3478]. **Fatman** [1193]. **Fauce** [2639]. **Fault** [48, 3770, 1998, 3403, 865, 2941, 1634, 2025, 2834, 1353, 2909, 1127]. **Fault-tolerance** [1998]. **Fault-tolerant** [48, 865, 2025, 2834, 1353, 1127]. **FB** [4082]. **FCBench** [3650]. **FDB** [752, 675]. **FDBKeeper** [4286]. **FDepHunter** [4303]. **FE** [1977]. **Feature** [921, 3534, 3758, 3585, 3438, 1169, 699, 3055, 2774, 3031, 2619, 3168]. **feature-oriented** [3055]. **feature-rich** [3168]. **featured** [2874]. **featuresets** [1243]. **FEBench** [3438]. **Federated** [3699, 3412, 4143, 4339, 4231, 3505, 4264, 3922, 3347, 3756, 2876, 3262, 3546, 3639, 4063, 3628, 3918, 3352, 3616, 3246, 4226, 3290, 4228, 3917, 2987, 1684, 2969, 5, 3179, 3111, 2836, 2870, 2767, 2412, 2696]. **FederatedScope** [3246]. **Federation** [4122, 3085, 2896, 2840]. **federations** [2064, 2455]. **FEDEX** [3144]. **FedGTA** [3546]. **FedSM** [3918]. **FedSQ** [3917]. **FedTSC** [3111]. **FedVSE** [4339]. **feed** [964, 1370]. **feed-following** [964]. **Feedback** [3745, 3473, 93, 1011, 1328, 1639, 796]. **FERRY** [482]. **FERRY-based** [482]. **FEVER** [310]. **Few** [4136, 3744, 2750]. **Few-Shot** [4136, 3744]. **FHL** [3045]. **FHL-cube** [3045]. **fi** [2727]. **Fiber** [1769]. **Fiber-based** [1769]. **fidelity** [256]. **fields** [2657]. **Fight** [3697]. **File** [870, 3849, 1972, 48, 2525, 2767, 1928]. **files** [79, 2411, 2185, 2856]. **filesystems** [162]. **Filling** [3362, 3328, 3957, 2661, 525]. **FILM** [3207]. **Filter** [3687, 4255, 1952, 1905, 2530, 828, 607, 2908, 2933, 1352, 1486, 3817]. **filter-based** [1905]. **filter-placement** [607].

Filtered [4366, 4049, 4125]. **Filtering** [4206, 3671, 3225, 2078, 1061, 2962, 168]. **Filtering-Sampling** [3671]. **Filters** [3810, 976, 2955, 1912, 2530, 2431, 2671, 2277]. **Financial** [4188, 2232]. **FINCH** [87]. **Finding** [3998, 4329, 4182, 2119, 152, 1652, 2144, 1008, 10, 1442, 1757, 3015, 3377, 2573, 1694, 1060, 1202, 2447, 2008, 1719, 571, 787, 1322, 497, 2379, 1396, 2652]. **Fine** [3311, 3228, 4236, 4159, 3722, 4253, 3044, 3811, 2569, 3161, 2112, 4109, 4028, 4027, 673, 2523, 2831, 1949, 2636, 1888, 1665, 1242, 1068, 2521]. **Fine-Grain** [4236]. **Fine-Grained** [3311, 3722, 4253, 3811, 3161, 4028, 4027, 3228, 3044, 2569, 2112, 673, 2523, 2831, 1949, 1888, 1665, 1242, 1068, 2521]. **Fine-Tuning** [4159, 4109, 2636]. **FINEdex** [2831]. **FineLine** [2040]. **fingerprinting** [374]. **Finish** [1215, 1786, 2053]. **finite** [3170]. **finite-horizon** [3170]. **Fire** [3697]. **Firefighting** [3913]. **FireLedger** [2372]. **Firestore** [3841]. **FirmTruss** [3203]. **First** [3965, 4014, 4139, 2681, 145, 1809, 1124, 2273]. **First-Class** [4014, 2681]. **first-ever** [1809]. **FishStore** [2206]. **FIT** [1370]. **fitness** [2622]. **fitness-for-use** [2622]. **fits** [2100]. **Fix** [3848]. **fixed** [1847]. **fixes** [355, 2096]. **Fixing** [3345, 2187, 2699]. **FL** [3756]. **Flare** [2203, 3274]. **Flash** [707, 3344, 3413, 2184, 200, 2954, 708, 2512, 914, 2406, 2788, 80, 596, 840, 2589, 1653, 3559]. **Flash-based** [707, 2788, 596, 1653]. **Flash-LLM** [3559]. **FlashAlloc** [3413]. **Flashing** [43]. **FlashP** [2539]. **FlashStore** [465]. **FlashView** [1790]. **FLAT** [2603]. **FLEET** [4078, 3821]. **FlexChain** [3165]. **Flexibility** [3547]. **Flexible** [3532, 4324, 4227, 3835, 922, 2863, 4111, 1740, 3246, 105, 1575, 2348, 562, 2049, 2613, 1877, 3045, 488, 3187, 1991, 256]. **FlexPS** [1877]. **FlexPushdownDB** [2650]. **FLi** [462]. **Flight** [3923]. **Flink** [4274, 2770, 4052]. **Flink(R)** [1772]. **flipping** [603]. **Floating** [3650, 3298, 3041]. **Floating-Point** [3650, 3298]. **floats** [2690].

FLORIN [1406]. **flourished** [330]. **Flow** [3359, 4165, 3226, 4135, 1778, 1977, 677, 1796, 2812, 2644]. **Flow-learning** [4165]. **Flow-loss** [2644]. **Flower** [1796]. **flows** [678]. **FlowWalker** [3678]. **FluidKV** [3647]. **flushing** [2568]. **Fly** [3481, 190, 462, 378, 2959, 2067, 1840]. **Focus** [4105]. **focused** [997]. **foe** [1955]. **Fold** [3982]. **Folk** [1038]. **Folk-IS** [1038]. **folks** [1146]. **following** [964, 700]. **Footprint** [4302, 3647, 1130]. **Footprints** [4267]. **ForBackBench** [2924]. **Forecasting** [3601, 3983, 2026, 3625, 3271, 3835, 3985, 3721, 3976, 3449, 4247, 3600, 2732, 1770, 2823, 81, 2724, 3016, 2882, 2539]. **forecasts** [39]. **Foreign** [4337, 1129, 1862, 412]. **foreign-key** [1129]. **Foresight** [1807]. **Forest** [3757, 181, 2970]. **Forests** [3381, 2062]. **Forgetting** [4363]. **Forgotten** [3420]. **Fork** [3244, 3244]. **Fork-based** [3244]. **forkable** [1920]. **Forkbase** [1920]. **form** [291, 57, 525]. **form-based** [525]. **formal** [1837]. **Format** [4077, 3849]. **FormaT5** [3580]. **formation** [208, 2181]. **Formats** [3396, 3554, 2967, 1762, 2525]. **Formatting** [3508, 3364, 3580]. **forms** [58, 486]. **forms-based** [58]. **Formula** [3501]. **Formulation** [4320, 1405]. **forward** [1741, 1432, 2780, 2514, 2771, 1167]. **Foundation** [3804, 3701, 3220, 3754]. **Foundations** [436, 1945, 3130]. **founded** [3140]. **four** [2671]. **four-dimensional** [2671]. **fourth** [626]. **FP** [1384]. **FPGA** [2505, 3250, 2268]. **FPGA-Accelerated** [3250]. **FPGA-accelerators** [2505]. **FPGAs** [3530, 246, 189, 922, 399]. **Fractional** [3948]. **fragmentation** [2183]. **Fragments** [461]. **Frame** [4208]. **Framework** [4338, 3336, 3577, 3574, 3975, 4000, 3144, 3925, 4224, 3715, 3486, 4263, 277, 3560, 3676, 3199, 3870, 3985, 3314, 3274, 3358, 3572, 3441, 3722, 4146, 3348, 3678, 3343, 3215, 3584, 4331, 3475, 3766, 4189, 3798, 3999, 3265, 4111, 3278, 3201, 3783, 3717, 3565, 3563, 3449, 3809, 3594, 4287, 4050, 3603, 3851, 1390, 1813, 2362, 2694, 1462, 1525, 2826, 855, 1131, 2846, 93, 1649, 2758, 2656, 7, 937, 2823, 703, 219, 1042, 2534, 2207, 1311, 902, 2587, 404, 831, 3120, 380, 910, 2004, 2875, 1815, 2990, 2754, 3189, 1268, 3179, 2917, 513, 795, 1601, 632, 2204, 631, 2830, 980, 2756, 911, 2514, 82, 2629, 2214, 3081]. **framework** [1097, 1414, 1293, 1059, 1159, 323, 1084, 1014, 1307, 2149, 2511, 2484, 2135, 1217, 1499, 1487, 1486, 1690, 1749, 1587, 2874, 2828, 2286, 2003, 2309, 2928, 704, 249]. **Frameworks** [3636, 3145, 1703]. **Fraud** [3199, 3870, 2232, 2000, 1577, 2839]. **Fraudulent** [3439]. **FREDE** [2570]. **Free** [4233, 4082, 4097, 2284, 4094, 3310, 3994, 4147, 1876, 1467, 3174, 2979, 1109, 1887, 1067, 2548, 1332, 565, 2332, 1289, 1429, 2898]. **Free-Space** [3994]. **Freely** [4294]. **Fremer** [4247]. **Frequency** [3953, 3402, 2646, 2965, 4308, 2791, 3913, 3185, 4247, 3591, 2073, 188, 2917, 717, 840, 1749, 2900]. **Frequency-Hiding** [3402, 2791]. **Frequency-Revealing** [3402]. **Frequent** [4007, 3367, 3787, 3591, 948, 152, 1047, 290, 684, 821, 1243, 710, 267, 781, 2900]. **frequent-pattern** [290]. **frequently** [653]. **fresh** [653, 1338, 1865]. **FreshGNN** [3654]. **freshness** [3068]. **fridge** [2373]. **friend** [1955, 1479, 1172]. **Friendly** [4349, 4202, 2208, 1330, 519, 862, 2805, 2898]. **friendship** [1439]. **Fries** [3183]. **FrogWild** [1296]. **Froid** [1867, 2178]. **Frontier** [1923]. **Frost** [3059]. **FS** [3505]. **FS-Real** [3505]. **FSDP** [3457]. **FSM** [3722]. **FSMDTW** [4233]. **FSST** [2452]. **FTL** [914]. **FTL-less** [914]. **Fu** [2896, 3085]. **Fucci** [4104]. **Full** [3978, 4055, 3906, 3465, 256, 3624, 2734, 1118, 662, 2956, 960, 2626, 2376]. **Full-fidelity** [256]. **Full-Graph** [3978, 4055, 2956]. **Full-Power** [3465]. **Full-Text** [3906, 960]. **Fully** [1456, 3793, 3207, 3498, 3976, 2273, 3457, 3057, 2346, 3063, 2241, 2874, 2929]. **fully-dynamic** [3057, 2346]. **fully-featured** [2874]. **fully-mergeable** [2241]. **Function** [3706, 3858, 3025, 2986]. **Functional** [3805, 4116, 1314, 686, 3662, 1900, 357, 1515, 34, 131, 2276, 33, 272, 1560, 464, 349, 2312, 2697, 1166, 2147, 2702]. **Functions** [3656, 3462, 898, 3205, 2198, 2955, 2552, 676, 2421, 3122, 2981, 287, 2533, 86, 1312, 2854, 516, 435, 2437, 818]. **functions-as-a-service** [2437]. **Fundamentals** [674, 3464, 2025]. **Fuse** [4048]. **Fused** [4234]. **fusing** [757]. **Fusion** [1970, 3644, 1965, 331, 1080, 1835, 1605]. **FusionFlow** [3608]. **FusionQuery** [3644]. **Future** [4260, 3476, 3310, 509, 3078, 3133, 2786, 758, 1661, 2687, 3137, 879, 2776]. **Future-Proof** [4260]. **Fuxi** [1127]. **Fuzzing** [4104]. **Fuzzy** [1350, 2234, 896, 1141].

G [3924, 3002, 1527, 4093]. **G-SQL** [1527]. **G-tran** [3002]. **G-View** [4093]. **gadget** [2485]. **Gain** [1410]. **Gaining** [3932]. **Galaxybase** [3836]. **GalaxyWeaver** [4293]. **GALO** [2170]. **Galvatron** [3200]. **game** [208, 2046]. **game-based** [2046]. **games** [275]. **Ganos** [3485, 3074]. **Gap** [3313, 3496, 3874, 3647, 3372, 1785, 1703, 255, 1054, 2284, 2661, 2318, 698]. **Gaps** [3548, 747]. **gaps-range-tolerances** [747]. **Garbage** [4057, 2272, 2083]. **GARUDA** [1573]. **GastCoCo** [3961]. **GaussDB** [4285, 3828, 4282, 2734]. **GaussDB-Vector** [4282]. **Gaussian** [2596]. **GBDT** [2140]. **GC** [2006]. **GConnect** [242]. **gCore** [3408]. **GDDs** [2089]. **GDPR** [2881, 2339]. **GeCo** [2618]. **GEDet** [2750]. **geeWhiz** [4327]. **GEMINI** [1196]. **General** [4000, 4173, 3446, 3436, 3929, 3498, 1281, 3903, 1343, 855, 1162, 1649, 1654, 2627, 1067, 3056, 516, 1665, 2126, 2484, 1499, 2441, 2928, 249]. **General-Purpose** [4173, 3446, 3903, 1499]. **Generalizable** [3958]. **Generalization** [3318, 4099, 248, 2216]. **generalizations** [2811, 3082]. **Generalize** [3809].

Generalized [2953, 4163, 4115, 934, 799, 899, 2606, 1201, 830, 2100, 3192]. **Generated** [3523, 4312, 3548, 2847, 1406, 2131, 1472]. **generates** [338]. **Generating** [3550, 1575, 3153, 3299, 41, 512, 416, 3284, 3520, 590, 3973, 3518, 3807, 1213, 2151, 650, 1485, 33, 2505, 1574, 1150, 2728]. **Generation** [3566, 3884, 3155, 4207, 4161, 3533, 3885, 3695, 3931, 4035, 4197, 4314, 4322, 3898, 3790, 737, 2732, 1455, 2986, 1515, 3077, 882, 114, 2205, 1914, 1041, 1100, 3105, 2884, 909, 2209, 2556]. **Generations** [3524]. **Generative** [3197, 3239, 3559, 2403, 1915]. **generator** [1461, 3110]. **Generic** [3512, 2823, 985, 513, 3038, 765, 704]. **Genesis** [4069]. **Genetic** [4265, 709]. **genomes** [961]. **genomic** [741]. **GENTI** [3714]. **genuine** [1900]. **Geo** [3656, 4249, 3578, 4018, 3563, 3735, 3839, 855, 2742, 1021, 1391, 2148, 1115, 2238, 2168, 761, 2605, 2976, 1597, 1141]. **geo-correlated** [1021]. **Geo-Distributed** [3656, 4249, 3563, 3735, 3839, 2742, 2148, 2238, 2976]. **Geo-Replicated** [3578, 4018, 1115, 2168]. **geo-replication** [2605]. **geo-social** [855]. **geo-textual** [1391, 1597, 1141]. **geo-visualization** [761]. **GeoBloom** [4066]. **Geographic** [4066]. **Geometric** [1819, 3599, 857]. **Geometry** [4153, 864]. **GeoScope** [1021]. **Geospatial** [4355, 479, 3704, 3091, 2723, 1928, 3095]. **geotagging** [1815]. **ger** [1235]. **Gestural** [1026]. **GestureQuery** [930]. **get** [2256]. **Getting** [951, 1171, 1338]. **Ghosts** [4303]. **gigantic** [3166]. **Ginex** [3008]. **Giraph** [1303]. **GIS** [863, 1409]. **GIST** [1268]. **GitHub** [3887]. **give** [1033]. **given** [1624]. **Glance** [4105]. **GlassDB** [3268]. **GLAV** [784]. **Glean** [2561]. **Global** [460, 3360, 3427, 3627, 3556, 3249, 4147, 886, 2325, 1570, 165]. **Global-Local** [3556]. **Glue** [3435]. **gMission** [1162]. **GN** [3322]. **GNN** [3978, 3693, 3577, 4019, 4091, 2562, 3751, 3646, 3758, 3636, 3766, 3798, 3627, 3666, 3637, 2611, 2928]. **GNN-Based** [4019, 3666]. **GNNs** [3372]. **Go** [3531, 93]. **Goal** [327]. **Goal-oriented** [327]. **Gobblin** [1373]. **goes** [1146, 2225, 1651]. **going** [455]. **Goku** [4003]. **GOLDRUSH** [2000]. **Good** [4372, 3763, 1469, 1958, 1803]. **Google** [2759, 2770, 101, 3429, 1188]. **GooseDB** [4334]. **GORAM** [4231]. **Gorilla** [1378]. **gossip** [2148]. **gossip-based** [2148]. **Governance** [3440]. **GPEmu** [4107]. **GpJSON** [4203]. **GPS** [430]. **GPT** [3689, 3132, 3030, 3518, 3898]. **GPT-3** [3132, 3030]. **GPT-4** [3518]. **GPT-DB** [3518]. **GPT-Guided** [3689]. **GPTuner** [3689]. **GPU** [3693, 1304, 944, 3576, 3867, 2348, 2081, 3649, 3683, 4091, 853, 1249, 3537, 3997, 1857, 3608, 2143, 2760, 1622, 3017, 4023, 4010, 3678, 2649, 3636, 2538, 3627, 701, 4250, 4107, 2995, 4037, 2998, 3952, 3714, 847, 3555, 4059, 1861, 938, 3206]. **GPU-Accelerated** [4059, 3997, 4010, 3555, 3206]. **GPU-Based** [3678]. **GPU-oriented** [2649]. **GPU-Powered** [3714]. **GPUs** [2343, 2526, 3200, 2492, 2499, 1843, 2264, 4203, 1093, 532, 4109, 3952, 1326, 3988]. **GQ** [117]. **GQL** [4098]. **Graceful** [63]. **Grade** [4291]. **Gradient** [3634, 2107, 1711]. **grading** [1596]. **GRADOOP** [2002]. **GRAIL** [2169, 364]. **Grain** [4236, 2680]. **Grained** [3311, 3722, 4253, 3811, 3443, 3161, 4028, 4027, 673, 2523, 3228, 2515, 2831, 3044, 2569, 1949, 1888, 2112, 1665, 1242, 1068, 2521]. **gram** [2242]. **GraMi** [1047]. **grammar** [2974]. **grammar-compressed** [2974]. **Grammars** [4373]. **grams** [1002]. **GRANO** [2211]. **granulating** [3042]. **GRAPE** [1795]. **Graph** [3487, 3978, 3959, 3972, 3282, 3726, 4055, 4187, 4370, 4207, 3541, 3575, 3577, 3769, 3749, 3611, 3568, 3649, 3975, 3218, 3725, 2027, 443, 363, 3880, 4306, 4231, 4202, 4212, 3253, 3289,

3623, 4069, 3525, 4087, 776, 3751, 3966, 3625, 4230, 3657, 3496, 3654, 4150, 3270, 4246, 3226, 1600, 3963, 4364, 4177, 3885, 3546, 3358, 3266, 3697, 4005, 3961, 3942, 4063, 4200, 4216, 3287, 3360, 4010, 3677, 3722, 4008, 4167, 4133, 3427, 3392, 4039, 1578, 4084, 3465, 3723, 3300, 3678, 3956, 3987, 4137, 4262, 1149, 3302, 518, 3475, 3866, 909, 4357, 4035, 4174, 4234, 4269, 3836, 4293, 3480, 3711, 3949, 3728, 4250, 4368, 3717, 3556, 4047, 4342, 3710, 3947].
Graph
[4361, 4037, 4100, 3563, 3832, 3388, 4028, 3372, 4194, 4229, 3600, 3334, 4093, 4240, 3610, 4172, 4287, 230, 3606, 3365, 2680, 1953, 2381, 427, 1903, 1748, 231, 1921, 35, 1054, 2107, 1575, 2832, 2481, 2637, 234, 1534, 3103, 2393, 1235, 1548, 784, 2895, 232, 2348, 2845, 3002, 2906, 1377, 1424, 69, 2195, 2823, 875, 2534, 2377, 1523, 2540, 2877, 1047, 959, 1099, 1349, 1795, 2105, 2353, 2751, 2458, 2075, 2897, 1647, 2555, 2163, 2562, 2065, 2356, 2613, 2245, 2682, 380, 1096, 1303, 2993, 1788, 3098, 1562, 1995, 2725, 1405, 1857, 2902, 2885, 1172, 2002, 1508, 1308, 794, 2855, 1401, 2801, 2066, 2089, 790, 1771, 2190, 2106].
graph
[3060, 2932, 3055, 2070, 2007, 1245, 2825, 598, 1527, 1094, 1347, 2983, 3130, 2492, 2649, 1296, 2319, 535, 3008, 989, 2956, 1841, 1866, 1052, 992, 1557, 1843, 1204, 3016, 1258, 1539, 1128, 1256, 2053, 2964, 2642, 1325, 2589, 2867, 1259, 117, 1018, 2171, 2570, 1669, 40, 517, 1847, 2006, 2211, 2640, 1853, 1001, 2721, 1211, 2707, 1203, 532, 1051, 1587, 3020, 639, 1495, 1860, 2118, 2840, 2641, 172, 633, 801, 970, 1342, 3029, 370, 588, 2901, 912, 1253, 1329, 2364, 1228, 1686, 2233, 2336, 244, 864].
Graph-Aware [3606]. **Graph-Based** [3282, 4207, 4133, 4039, 4137, 3949, 4342, 4100, 4240, 4287, 1600, 1149, 2393, 2195, 2190, 1841, 2211, 2640]. **Graph-Oriented** [4231]. **graph-structured** [3130, 40, 633]. **graph-traversal** [2492]. **graphalytics** [1562]. **GraphAr** [4005]. **GraphGen** [1428]. **graphical** [30]. **Graphics** [3354, 553, 400, 539, 912]. **Graphics-Driven** [3354]. **Graphite** [2319]. **GraphJet** [1559]. **GraphLab** [3525, 632]. **graphlet** [1649]. **GraphMat** [1325]. **GraphMineSuite** [2637]. **GraphOS** [3541]. **GraphRAG** [4207]. **Graphs**
[3487, 4054, 4256, 3497, 3873, 3762, 3593, 3501, 3643, 3621, 3818, 3524, 3632, 4231, 3737, 4245, 3357, 3623, 4225, 3622, 3224, 3842, 3405, 3199, 3322, 3697, 3906, 3819, 3680, 3408, 3928, 4022, 4071, 3758, 3148, 3243, 3866, 3766, 3395, 3331, 3755, 3783, 3787, 4115, 3204, 3254, 3714, 3738, 3742, 4113, 4012, 3764, 3748, 3729, 3334, 3612, 3329, 3434, 654, 2381, 242, 3051, 1907, 557, 687, 311, 1423, 1870, 3173, 1805, 2631, 2925, 2934, 3057, 2927, 2258, 97, 2566, 2207, 2643, 1357, 2096, 2396, 3135, 2921, 2950, 1555, 1794, 1687, 3131, 1801, 602, 2824, 2343, 689, 1842, 1125, 2090, 2260, 1497, 560, 571, 2104, 1182, 1431, 1818, 2515, 991, 2663].
graphs [1735, 2571, 2932, 2926, 1650, 2542, 1445, 1836, 2606, 1757, 2274, 2128, 402, 2790, 2709, 2590, 3105, 3191, 429, 773, 1007, 854, 1974, 1173, 1273, 1866, 993, 1293, 2264, 2332, 1322, 611, 638, 2429, 2310, 2379, 2573, 2911, 1701, 2557, 2952, 2785, 411, 981, 1064, 1428, 1591, 1217, 1499, 1060, 2273, 2311, 2486, 2817, 3190, 3043, 364, 848, 445, 1984, 2077, 820, 1522, 1937, 2822, 2928, 1472].
GraphScope [2751, 2707].
GraphSparseNet [4135]. **GraphTwist** [1329]. **GREAT** [4115]. **GRETA** [1841]. **GRewriter** [4285]. **Grid** [3943, 3482, 2989, 1136]. **GriDB** [3292]. **grids** [169]. **Gromov** [4234]. **Gromov-Wasserstein** [4234]. **Grounding** [3304]. **Group** [233, 3533, 3989, 4018, 3211, 3787, 901, 764, 2049, 1442, 756, 1023, 2573, 546, 3190, 3186, 2669]. **group-based** [1442]. **Group-by** [3533]. **GroupFinder** [901]. **Grouping** [3924, 3859, 3256, 804]. **groupings** [69]. **groupjoin** [2673]. **Groups** [4074, 1442, 2368, 751]. **groupwise** [2676].

Grow [3398, 2446]. **Growing** [1308, 3317]. **GS** [165]. **GS-TMS** [165]. **gSketch** [588]. **gStore** [554]. **GTI** [4039]. **Guarantee** [3822, 4009, 688, 2720, 1220, 2876, 2511]. **guaranteed** [1564, 2420]. **guaranteeing** [259]. **Guarantees** [3143, 4276, 4067, 3888, 3700, 3024, 60, 182, 681, 2405, 1265, 2342, 2241, 2306, 183, 3183, 1203, 2286]. **Guarded** [4070, 683]. **guidance** [2103]. **guide** [2302]. **Guided** [3601, 3983, 2226, 4161, 3689, 2368, 536, 2945, 4156, 2170, 3087]. **guideline** [2652]. **Guiding** [3162, 4320]. **Gym** [3820].

H [2349, 140]. **H-store** [140]. **Haar** [1838]. **HADES** [4125]. **HADOOP** [860, 1435, 863, 1813, 386, 768, 861, 562, 1118, 734, 933, 1384, 1373, 850, 721]. **HadoopDB** [247]. **HadoopViz** [1394]. **HAIChart** [3782]. **hailing** [2656]. **HAKES** [4191]. **halfway** [2450]. **HaLoop** [365]. **HAMSTER** [185]. **HANA** [3831, 1775, 3058, 897, 2225, 1762, 1767, 4273, 2229, 887]. **Hand** [4373, 2433]. **Hand-Crafted** [4373]. **handful** [1308]. **handle** [719]. **handling** [513, 286]. **hands** [2011, 3106]. **hands-off** [2011, 3106]. **handsfree** [2188]. **handshake** [1063]. **Happiness** [3186]. **Hard** [3491, 2256, 357, 2327, 1536, 2344]. **Hardened** [3785]. **hardening** [2212]. **Hardness** [3949, 32]. **Hardware** [3058, 838, 3537, 4246, 3702, 3646, 3806, 3418, 3145, 1439, 1157, 2155, 1079, 2180, 1826, 852, 1436, 884, 1933, 1332, 559, 2268, 1627, 693, 476, 2079]. **Hardware-Accelerated** [3537]. **Hardware-Efficient** [3806]. **Hardware-oblivious** [838]. **Harmonia** [2290]. **Harmonizing** [3940, 1931]. **Harmony** [3017]. **Harnessing** [3884, 3741, 4303, 3620, 1919, 3132]. **Harvesting** [260]. **Hash** [3374, 3260, 4169, 3626, 3205, 40, 1009, 1251, 708, 2955, 853, 2544, 2980, 1276, 1747, 991, 3028, 285, 3259]. **Hash-base** [40]. **hash-table** [3028].

Hashed [20]. **Hashing** [3154, 3231, 3549, 3712, 2555, 1452, 2959, 541, 2345, 1828, 1464, 1460, 1959, 608, 994]. **Hausdorff** [556]. **Having** [3967]. **Having-Clauses** [3967]. **HAWK** [4237]. **haze** [1659]. **Hazelcast** [2768]. **HD** [1902, 924]. **HD-index** [1902]. **HDBTracker** [1147]. **HDFS** [1138]. **HDPView** [2943]. **headings** [1359]. **health** [915, 481, 2]. **Healthcare** [3730, 1196, 3071]. **Hear** [1262, 1949]. **Heavy** [4198, 4321]. **HEDA** [3210]. **HELIX** [2074, 1990]. **help** [1404]. **helpdesk** [62]. **HENCE** [3392]. **HENCE-X** [3392]. **Heracles** [2568]. **Hercules** [2961]. **HERE** [1566]. **Hermes** [4294, 4138]. **HERMIT** [2196]. **Hero** [3686]. **Heron** [1781]. **Heta** [4172]. **Heterogeneity** [3392, 3343, 3246, 3194, 662]. **Heterogeneity-Agnostic** [3392]. **Heterogeneity-Aware** [3343, 662]. **Heterogeneous** [3693, 3550, 3598, 3867, 3596, 1718, 3842, 4090, 3968, 4079, 3446, 4159, 3475, 3137, 3796, 3667, 4072, 3195, 3145, 3269, 4172, 3320, 3765, 3644, 1859, 1157, 1792, 2008, 2388, 2758, 2081, 950, 2243, 1680, 2324, 2084, 949, 2809, 2386, 2984, 1689, 1533, 2792, 3026, 129, 2870, 2017, 772, 605, 2998]. **HetExchange** [2081]. **heuristics** [2444]. **Hexastore** [83]. **HGTAP** [4077]. **Hidden** [3713, 2300, 1101, 1147, 665, 1798]. **Hiding** [3402, 3586, 2791]. **Hierarchical** [4225, 2542, 3256, 3630, 3773, 4237, 1541, 2895, 1896, 197, 1403, 1306, 1320, 98, 1947, 89, 2190, 422, 1364, 2825, 1359, 1339, 996, 2559, 2045, 2894, 2380, 1878, 2828]. **hierarchies** [2015]. **Hierarchy** [4178, 3180, 1636, 53, 375]. **High** [3953, 3273, 1024, 3638, 359, 4026, 3375, 1679, 4078, 3212, 4294, 3323, 539, 3560, 4308, 4264, 3142, 4337, 3356, 4006, 597, 3157, 3937, 4141, 4039, 338, 3678, 3296, 3567, 1471, 3592, 3913, 4203, 3836, 3778, 3934, 3829, 4218, 3240, 3903, 4058, 4296, 3315, 3255, 3434, 308, 863, 1476, 1844, 2826, 1902, 1876, 2637, 3, 2372, 1789, 1192, 1255, 469, 3068, 3002, 465, 1523, 2779, 2820, 1566, 924, 1957, 288, 2818, 2467, 1634, 2060, 1529, 140, 2943, 1077, 1199, 151, 2598, 3075, 2078, 3110, 25, 3060, 1558, 2548, 2852, 1925, 276, 362, 1191, 2466, 298, 971, 1862, 1221, 1325, 2482, 3175, 452, 1694, 2874, 3073, 2160]. **high** [96, 3182, 1773, 2309]. **High-Accuracy** [4141]. **high-availability** [1773]. **high-capacity** [1862]. **high-contention** [1844]. **high-D** [2779]. **High-Dimensional** [4026, 4264, 3142, 3356, 4006, 4039, 3315, 3434, 1902, 3, 924, 2060, 1558, 1925, 2466, 971, 3175, 2309]. **High-end** [338]. **high-energy** [2818]. **High-Frequency** [4308, 3913]. **high-level** [288, 1077, 1199]. **High-Order** [4218]. **High-Performance** [3273, 3375, 4078, 3212, 4294, 3323, 3157, 3937, 3678, 4203, 3934, 3829, 4296, 3255, 359, 597, 3240, 308, 1476, 2826, 1876, 2637, 1255, 1523, 2820, 1634, 1529, 140, 3110, 25, 3060, 2852, 1191, 298, 2874]. **High-Resolution** [3638]. **High-Speed** [3778, 4058, 1471]. **High-throughput** [539, 2548]. **High-Utility** [3903]. **high-value** [1694]. **High-Velocity** [3567]. **higher** [653, 707]. **higher-order** [653]. **highlighting** [127]. **Highly** [3154, 1017, 4278, 3309, 4133, 3346, 3201, 3559, 4109, 654, 193, 1306, 2981, 2197, 533, 1567, 1632]. **Highly-Efficient** [3559, 4109]. **Hillview** [2146]. **Hindsight** [2536]. **Hint** [4328]. **Hint-QPT** [4328]. **Hinting** [3417]. **Hints** [4328]. **Hippo** [2887]. **HippogriffDB** [1622]. **Histogram** [3664, 864, 226, 1755]. **histogram-based** [1755]. **histograms** [214, 431, 581, 241, 1947, 1929, 996]. **Historical** [3654, 3293, 4084, 3355, 4065, 1946, 74, 1664, 2645]. **History** [1661, 3850, 339, 2187, 766, 1310]. **History-Based** [3850]. **Hit** [3820]. **Hitters** [4198]. **Hitting** [2425]. **Hive** [1136, 323, 3493]. **HiveQL** [2699]. **HMAB** [3180]. **Hoc** [3499, 78, 459, 1944, 2202, 2294, 134, 325, 109, 3973]. **HocoPG** [3926]. **hold** [1714]. **HoliPaxos** [4151]. **Holistic** [4086, 4254, 1851, 4129, 3768, 4283, 2434, 1736, 1728, 2214, 1120, 2497, 1554, 3084, 2074]. **HoloClean** [1728]. **Holon** [3797]. **Homerun** [1946]. **Homogeneous** [2311, 1478]. **Homomorphic** [3926]. **Homomorphically** [3210]. **homomorphism** [443]. **Hone** [933]. **Hop** [4211, 1109, 4113, 4256, 2819, 453, 2110, 2296]. **hop-constrained** [2819, 2296]. **horizon** [3170, 4311, 2686]. **horizons** [2871]. **horizontal** [2255, 388]. **horses** [2203]. **Horton** [993]. **Host** [3547]. **hostage** [1714]. **hosted** [104]. **hosting** [800]. **Hotspot** [4194]. **Hours** [4037]. **how-provenance** [2798]. **HPC** [1703, 2319]. **HPO** [4080]. **HRNet** [3773]. **HSAP** [3930]. **hStorage** [662]. **hStorage-DB** [662]. **HTAP** [3068, 4278, 3277, 3791, 3836, 2960, 4210, 3614]. **HTML** [1359]. **Hu** [3085, 2896]. **Hu-Fu** [2896, 3085]. **Huawei** [1970]. **hub** [2298, 1868]. **HubPPR** [1645]. **hubs** [1322]. **Huge** [3242, 2830]. **Hum** [747]. **Hum-a-song** [747]. **Human** [1615, 3386, 3663, 3561, 1825, 573, 535, 3773, 4244, 3782, 3930, 1216, 1215, 2703, 2951, 1926, 2174, 2041, 3084, 1990]. **Human-assisted** [535]. **Human-Centered** [3386]. **Human-in-the-Loop** [4244, 3930, 1825, 2703, 2174, 3084, 1990]. **Human-powered** [573]. **humming** [747]. **Hunting** [2310, 99]. **hurdles** [3017]. **Husky** [1487]. **HV** [375]. **HV-tree** [375]. **HVS** [2825]. **HyBench** [3614]. **Hybrid** [1565, 1050, 3259, 3337, 2891, 4254, 4068, 4185, 4023, 824, 3791, 3798, 3448, 3952, 3149, 247, 2261, 1662, 2607, 944, 2706, 691, 2194, 521, 1975, 2980, 2760, 662, 2374, 722, 2739, 2278, 701, 2650]. **hybrid-store** [722]. **HYDRA** [1994, 1858, 2050, 2292]. **HydraList** [2358]. **HyMAC** [2706]. **HypDB** [2016]. **HyPE** [944, 1157]. **Hyper**

[2122, 537, 4020, 2903, 1803, 2887, 2946, 2903]. **Hyper-local** [537]. **hyper-parameter** [2903, 2887, 2946]. **Hyper-Triangles** [4020]. **Hyper-tune** [2903]. **HyperBlocker** [3988]. **Hypergraph** [3321, 2424, 1747]. **Hypergraphs** [4127, 4020, 985, 2313]. **hyperlinks** [1003]. **hyperloglog** [1917, 2661, 3668]. **Hyperparameter** [3760]. **Hyperplane** [3231]. **Hyperslab** [4201]. **Hyperspace** [2763]. **hypersphere** [2366]. **Hypertree** [3948]. **hypotheses** [1088]. **Hypothesis** [3783, 3519]. **HYRISE** [521].

I/O [3323, 1622, 2932, 862, 771, 1495, 3738, 636]. **I/O-efficient** [2932]. **I/Os** [3344]. **I2RS** [1391]. **iAVATAR** [497]. **iBench** [1461]. **Ibex** [1089]. **IBM** [316, 882, 1564, 1964, 2171]. **IBminer** [927]. **iBTune** [2130]. **ICARUS** [2041]. **iCBS** [561]. **IcedTea** [4033]. **ICS** [2562]. **ICS-GNN** [2562]. **IDAR** [2367]. **IDE** [4349, 1407]. **IDEA** [2149]. **Ideal** [4037]. **Ideas** [3524, 1618]. **iDEC** [2369]. **identifiability** [2794]. **Identification** [3778, 620, 18, 12, 1218]. **Identifying** [92, 2422, 437, 372, 3043, 654, 76, 496]. **identity** [687]. **IDF** [3279]. **idiosyncrasies** [2532]. **iEDeaL** [3201]. **If** [3494, 3208, 4262]. **iFlow** [484]. **Ifs** [4036]. **iGraph** [380]. **IHCS** [2194]. **IL-Miner** [1630]. **Image** [3881, 3101, 1391, 2186, 1250, 1731, 925, 1387, 497, 701]. **images** [2485, 2787]. **imaging** [338]. **Imbalanced** [3201]. **ImDiffusion** [3570]. **imminent** [2735]. **immutable** [785]. **Impact** [3524, 3774, 4006, 3383, 4316, 4148, 1844, 366, 1556, 252, 1189, 2339, 3090]. **Imperative** [3951, 3877, 3830, 1867]. **Imperfect** [4152]. **Implementation** [3909, 1493, 799, 107, 2102, 285, 2153, 1229, 1194]. **implementations** [3130, 2159]. **Implementing** [3494, 162, 549]. **Implications** [4080, 1189, 1316, 1460, 532]. **implicit** [1218, 1648]. **importance** [1739, 221]. **impossibility** [1099]. **imprecise** [361]. **improve** [64, 404, 1489]. **Improved** [3980, 1910, 235, 2329, 2180, 110]. **Improvement** [3589, 3009]. **Improving** [3386, 2054, 3337, 2974, 4336, 1276, 210, 2499, 2547, 840, 4217, 240, 2478, 3710, 1754, 2630, 1734, 2680]. **Imputation** [4332, 4180, 3889, 3569, 3545, 3806, 3582, 4218, 4213, 3664, 2685, 1738, 2318, 2854, 1331]. **Imputed** [3570]. **ImputeVIS** [3889]. **Imputing** [3772]. **In-cache** [1249]. **In-Database** [3486, 4195, 3681, 3960, 2189, 1939, 2208, 1498, 1268, 1806]. **In-Depth** [3724, 4050, 382, 2104, 790, 2915, 1307]. **In-Enclave** [3837]. **In-Memory** [3831, 3259, 3733, 3297, 4196, 3391, 2248, 1224, 3542, 1493, 2866, 2272, 1263, 2545, 2989, 1374, 2092, 1975, 838, 1570, 2936, 1650, 2358, 1835, 1572, 1361, 3008, 1378, 1189, 721, 1491, 2883, 1804, 2642, 2477, 1602, 2020, 2373, 202, 1693, 2498, 2151, 1494, 1623, 1074, 1326, 2240, 1702, 2849]. **In-network** [2614, 2910, 3027, 2290]. **In-page** [2991]. **in-place** [1351]. **In-RDBMS** [1933]. **in-situ** [1792]. **in-storage** [1529]. **in-time** [725]. **InBox** [3947]. **incentive** [2696]. **incentive-driven** [2696]. **Incentives** [3547]. **incentivized** [1732]. **including** [1847]. **Inclusion** [4056, 1917, 1287]. **Incomplete** [3772, 4226, 2503, 1218, 1588, 939, 605]. **Incompleteness** [166]. **Inconsistency** [4064, 2416, 2535]. **inconsistent** [812]. **Incorporating** [2288]. **IncrCP** [4044]. **increased** [721]. **increasing** [1643]. **Incremental** [4256, 3286, 1062, 4102, 4040, 3679, 4044, 1333, 2861, 1554, 3729, 819, 2574, 527, 1255, 561, 2534, 2592, 2613, 1811, 1683, 556, 2382, 1281, 2484]. **Incrementalization** [2353]. **Incrementally** [538, 1734]. **Incurred** [3244]. **independence** [175, 421, 645, 1190, 2522, 2863]. **independent** [347, 1424, 4340, 817, 2515, 111, 1445, 3018, 2439, 1608, 1156, 1108, 2929].

independent-set [817]. **Index** [3789, 1541, 4347, 3259, 4233, 3482, 3362, 4118, 3882, 3802, 4258, 3237, 4304, 3815, 3679, 2936, 3332, 4049, 4301, 3990, 4133, 3381, 3207, 4039, 4084, 3150, 3626, 3759, 273, 3151, 3316, 3755, 3409, 3667, 4153, 4061, 3703, 3757, 3800, 4100, 3658, 4113, 3315, 3724, 242, 200, 1774, 553, 1876, 292, 161, 1789, 2989, 543, 2489, 2847, 2346, 1138, 2537, 396, 2479, 2433, 1570, 2831, 575, 1136, 1066, 2340, 2852, 1879, 2358, 2306, 1852, 960, 2787, 596, 612, 1655, 2332, 2962, 2052, 1221, 845, 3175, 1853, 2586, 2975, 364, 375, 1055, 2240, 3012, 3182, 2948, 1902, 2346, 1892]. **Index-assisted** [1541]. **Index-Aware** [3381]. **index-based** [1853]. **Index-Free** [4233, 2332]. **indexable** [2369]. **Indexed** [1897, 3394, 2809, 1355]. **indexer** [730]. **Indexes** [4360, 4179, 4257, 3681, 3949, 4112, 3602, 156, 2997, 2259, 2544, 407, 438, 1885, 2304, 2890, 2483, 1339, 2962, 2278, 3037]. **Indexing** [3325, 4280, 1306, 1138, 3537, 3356, 1364, 3739, 3647, 3150, 3215, 589, 84, 3995, 173, 3335, 3317, 3046, 1737, 1208, 2462, 943, 2206, 1717, 2934, 682, 2847, 126, 462, 627, 614, 380, 2259, 3133, 563, 1109, 446, 841, 529, 821, 72, 1332, 644, 1721, 1561, 141, 2763, 518, 971, 1365, 269, 1048, 1633, 1625, 1645, 83, 2380, 447, 2196, 1660, 848, 2476, 164, 270, 171, 445, 3029, 2293, 2970]. **Indicator** [4054]. **Indicators** [4338]. **Indices** [3426, 3709, 2430, 2867]. **individual** [1343, 2299]. **individualized** [2130]. **Individuals** [3345]. **indoor** [2732, 2914, 2195, 1574, 1980, 2593, 1655]. **Induced** [3556, 2281, 1763, 981]. **induction** [2131]. **Inductive** [3253, 3737, 4150, 3728, 1238]. **Industrial** [4284, 2172, 2485, 1776]. **Industry** [3442, 102, 1437, 727, 1124]. **Industry-scale** [102]. **Ineffective** [4179]. **inequalities** [1889]. **Inequality** [1710, 1441]. **iNextCube** [322]. **InferDB** [3681]. **Inference** [3741, 4306, 4202, 3564, 3977, 3208, 4369, 3681, 4322, 3559, 2966, 1962, 1140, 2269, 432, 540, 2845, 31, 1274, 1498, 2490, 2689, 544, 2199, 2730, 1728, 1799, 1812, 2687, 1491, 2638, 843, 3123, 2963, 1673, 2611]. **inference-enabled** [1799]. **Inference-Friendly** [4202]. **inference-proof** [432]. **Inferray** [1491]. **Inferring** [1244, 2504]. **InfiniStore** [3288]. **Infinite** [4106, 3040, 1105]. **Infinity** [3817]. **Infix** [3367]. **Influence** [3379, 3177, 3974, 3573, 3731, 3641, 2680, 2370, 1278, 578, 1911, 1704, 1313, 1457, 2854, 1542, 2572, 1695, 1244, 2833]. **Influential** [1264, 3320, 1913, 1231, 372, 2378]. **InfoBox** [927]. **infoboxes** [583]. **InfoPuzzle** [764]. **Information** [3460, 3596, 3289, 2029, 3349, 4205, 4066, 3877, 3441, 3400, 3346, 335, 4209, 3796, 4072, 3939, 3320, 3765, 3971, 2425, 1021, 2284, 1432, 984, 607, 2324, 391, 2116, 2858, 1851, 2386, 2984, 2503, 23, 132, 166, 1407, 392, 1588, 630, 2547, 955, 414, 487, 1165, 772, 605, 3137, 947, 493, 434, 322, 492]. **Information-Oriented** [3289]. **information-theoretic** [2116]. **Information-Theoretically** [4205, 3346]. **informative** [557, 1226]. **Infrastructure** [4333, 1421, 724, 1152, 2495, 164]. **Infrastructures** [3195, 3816]. **Ingestion** [3483, 3803, 2206, 2080, 1373, 2149]. **inherent** [2919]. **inheritance** [210]. **initial** [1702]. **Initiated** [3636]. **initiative** [2442]. **Injecting** [687]. **Injection** [3770, 3686]. **Inlining** [3965, 2178]. **Inner** [4096, 3708, 3249]. **innovative** [1201]. **Input** [3248, 4002]. **inquiry** [2583]. **insecure** [2448]. **INsert** [4317]. **Insertion** [3669, 1789]. **Insertions** [3410]. **Insight** [3932, 3619, 1970, 2457, 3474]. **insightful** [496]. **Insights** [4295, 3826, 2320, 1807, 979, 940, 1948]. **Inspecting** [3474]. **Inspector** [2485]. **Inspired** [3581]. **Instance** [4144, 3160, 3358, 3370, 1589, 1630, 2784]. **Instance-Aware** [3370]. **instance-level**

[1630]. **Instance-Optimal** [4144]. **Instance-Optimized** [3160, 2784]. **instances** [1465, 585]. **Instant** [3348, 975, 2936, 3182]. **instantaneously** [464]. **instantiating** [2004]. **instruction** [1209]. **instructions** [1246, 3030]. **insufficient** [1661, 2422]. **Integer** [4163, 812]. **Integers** [3326]. **Integrated** [3827, 4278, 1169, 6, 2194, 1315, 884, 3180, 2597, 115]. **integrates** [2874]. **Integrating** [216, 4068, 3236, 3790, 1462, 1131, 473, 2893, 65]. **Integration** [2251, 4181, 4350, 3461, 3366, 436, 1252, 1410, 1461, 504, 281, 1589, 846, 261, 64, 2195, 331, 782, 889, 2024, 197, 199, 316, 500, 498, 2180, 23, 132, 758, 166, 2367, 1207, 1825, 2775, 2030, 2684, 1149, 1124, 796, 792, 618]. **integrative** [1196]. **Integrity** [3560, 3662, 1280, 522, 148]. **Intel** [2356, 1276]. **Intelligence** [3442, 3526, 4275, 4129, 3520, 3232, 297, 2951, 1149, 1429]. **Intelligent** [3935, 1828, 3665, 883, 1729, 3044, 2735, 473, 2804, 1089, 2173]. **intensive** [1979, 2737, 2556]. **intent** [2133, 2508]. **Inter** [4208, 2731, 2391, 1686]. **inter-block** [2731]. **Inter-Frame** [4208]. **inter-graph** [1686]. **inter-query** [2391]. **Interaction** [3898, 4051, 1814, 159, 1179]. **Interactions** [3488, 3371, 2569, 273]. **Interactive** [3884, 3497, 1140, 1160, 727, 2726, 3882, 3162, 4227, 4333, 1537, 3514, 350, 23, 3889, 1642, 3509, 3872, 4111, 4314, 2999, 3890, 3812, 2036, 2043, 4047, 3927, 1782, 3915, 740, 1366, 574, 1426, 321, 543, 1411, 2208, 2562, 746, 503, 2259, 2047, 1405, 1328, 2902, 132, 897, 1401, 2032, 1531, 1227, 1168, 2746, 3124, 369, 2470, 1577, 2427, 1725, 1790, 1561, 309, 1888, 2559, 1976, 2752, 1666, 497, 761, 2211, 935, 736, 1194, 2553, 1398]. **Interactively** [4336, 3121]. **interconnected** [772]. **Interconnection** [3832]. **Interest** [3217, 4146, 3947, 901, 1065, 2845, 1713, 1744]. **Interesting** [459, 4353, 2733, 1428]. **Interesting-phrase** [459]. **Interface** [3899, 2072, 1343, 1593, 1534, 199, 58, 1405, 930, 1227, 932]. **Interfaces** [3496, 3463, 3278, 197, 525, 3102, 2641]. **Interfacing** [3487]. **Interictal** [3201]. **Interleaved** [2279]. **Interleaving** [1852, 2380]. **interlinks** [2187]. **Intermediate** [4324, 2154, 2739]. **Intermittent** [2703, 2145, 2347]. **internal** [596]. **Internet** [865, 2800, 484, 511, 1923, 3853, 2743, 1127, 1776, 1551]. **Internet-of-Vehicles** [1776]. **Internet-scale** [484, 1551]. **Interoperability** [774, 1389]. **interplay** [1332]. **interpretability** [2801]. **Interpretable** [3492, 3730, 3663, 1226, 4306, 3197, 3352, 3178, 3111, 3138]. **interpretation** [2814, 1388]. **interpreting** [1949]. **intersection** [553, 534, 2979, 1246, 2042, 240, 2076]. **intersection-free** [2979]. **intersections** [2454]. **interstellar** [1718]. **Intertwined** [4200]. **Interval** [1126, 2073, 1741, 2949]. **Intervals** [3574, 3571]. **Intra** [4323, 2731, 1413]. **intra-** [2731]. **intra-document** [1413]. **Intra-Query** [4323]. **intractable** [363]. **invalidation** [2404]. **invariant** [2071]. **invariant-preserving** [2071]. **Invariants** [3238]. **invasive** [3010, 3645, 1623]. **inverted** [1699]. **Invertible** [4058]. **Inverting** [255]. **Investigating** [3640, 2176]. **Investigation** [4244, 2985, 2843]. **InZeit** [496]. **IoT** [3476, 4335, 3849]. **IoT-Native** [3849]. **IoTDB** [4097, 3767, 3489, 3752, 4217, 3185, 2972]. **IPA** [2071]. **IPS** [935]. **iRoad** [910]. **Irregular** [3574]. **IS-Label** [817]. **island** [1438]. **islands** [693]. **IsoBugView** [3121]. **IsoDiff** [2461]. **isolating** [2406]. **Isolation** [3273, 4245, 4067, 3888, 3261, 4176, 1087, 1005, 209, 2601, 2461, 2504, 259, 731, 2384, 3121, 2278]. **Isomorphic** [3757]. **isomorphism** [2540, 1327, 790, 1273, 1638, 32]. **IsoVista**

[3888]. **iSPEED** [2020]. **Issues** [3913, 881, 979]. **ITAA** [2173]. **item** [1609, 2354]. **Items** [3591, 2468, 152, 1652, 1243, 2900]. **itemset** [684, 267, 781]. **itemsets** [821, 1243, 710]. **iterated** [990]. **iteration** [3170]. **Iterative** [3631, 365, 190, 678, 1448, 3006, 925, 1022, 973, 2041, 1001, 2074, 1998, 1329]. **iteratively** [2675]. **iTuned** [274]. **IV** [1779]. **I've** [1734].

Janiform [1413]. **Java** [1122]. **JavaScript** [1167]. **jedAI** [1988]. **JENNER** [3011]. **Jet** [2768]. **JetScope** [1366]. **JexLog** [1584]. **JIM** [1140]. **JIT** [2471, 1777, 2081, 3228]. **JIT-based** [1777]. **JIT-Compiled** [3228]. **Job** [3839, 2238, 622, 1127]. **jobs** [621, 861, 1458, 1384, 1120, 721]. **Jodes** [4062]. **Join** [3859, 3706, 4144, 3785, 3533, 3645, 1934, 4169, 3986, 3360, 3341, 3529, 3581, 1352, 3378, 4062, 3464, 3225, 3893, 4148, 1671, 1140, 1135, 193, 1753, 2234, 1518, 2886, 985, 1467, 3014, 2979, 2980, 2582, 1834, 285, 225, 541, 398, 1505, 371, 1914, 453, 911, 1045, 1063, 2538, 1733, 1113, 1727, 1248, 1705, 417, 286, 671, 820, 1337, 77, 593, 631, 448, 1715, 244]. **join-project** [2979]. **Joinable** [3688, 3351]. **JoinBoost** [3398]. **Joined** [3795]. **joining** [1337, 2857, 1715]. **Joins** [3785, 3589, 2302, 3260, 1710, 1123, 3297, 3369, 3245, 3517, 4046, 3255, 661, 1930, 1009, 1251, 779, 1741, 37, 1513, 1482, 1040, 1918, 2398, 420, 853, 1969, 1276, 1056, 2885, 2281, 2294, 3189, 1441, 1350, 2415, 1832, 593, 657, 1677, 1492, 2857, 573, 631, 2164, 1852, 3038, 1097, 1862, 1229, 745, 990, 2860, 1318, 1839, 2691, 1133, 1037, 448, 77, 2135]. **joint** [2337, 1419]. **Jointly** [2490, 2460]. **journalism** [1589]. **journalists** [1156]. **Journey** [3252, 3510, 4290, 1493, 3139]. **JSON** [3155, 1777, 4281, 2537, 1722, 2888, 4203, 3809]. **Juneau** [2201]. **Jupyter** [2201]. **jury** [697]. **JUST** [4317, 1590, 500, 3277, 3310, 2708, 890, 507, 2781, 3011, 2499, 869]. **Just-in-Case** [3310]. **Just-in-time** [500, 890, 3011, 2499]. **JUST-INsert** [4317]. **Justifiably** [3284]. **JUSTINE** [4317].

K-means [2496]. **k-nearest** [429]. **K-reach** [680]. **K2** [4095]. **Kafka** [1766, 4299, 3455, 1363]. **Kamel** [3582]. **Kamino** [2634]. **KATARA** [1408]. **KAYAK** [1786]. **KBPearl** [2337]. **KBQA** [1675]. **KClist** [2379]. **KDV** [2695]. **KDV-explorer** [2695]. **Keep** [3230]. **Keeper** [4198]. **Keeping** [888, 612]. **keeps** [3163]. **KEIGO** [4178]. **Kelpie** [3081]. **Kernel** [3638, 3609, 2604, 2695, 2869, 2846, 3091, 1834]. **Kernels** [3150]. **Key** [4178, 3213, 3965, 3598, 3283, 4279, 3679, 3157, 3990, 3542, 4286, 4057, 1294, 2607, 1973, 1983, 2815, 1129, 465, 950, 2341, 192, 1869, 2435, 1756, 100, 1830, 1862, 2626, 2373, 1653, 3171, 412, 1326, 2240]. **Key-Value** [4178, 3157, 3542, 2607, 2341, 3171]. **keyless** [2860]. **Keymantic** [504]. **Keynote** [3526, 3940, 3939]. **Keys** [4255, 1357, 4337, 4316, 3662, 1515, 1317, 1107]. **Keyword** [667, 333, 97, 571, 3348, 75, 352, 504, 900, 797, 1155, 1586, 982, 591, 404, 1463, 129, 76, 756, 854, 345, 960, 180, 493, 2546, 1501, 981, 796, 970, 404]. **Keyword-aware** [667]. **keyword-based** [504]. **keyword-query** [180]. **keywords** [648, 1202]. **KG** [3497, 4338]. **KG-Roar** [3497]. **KGFabric** [3832]. **KGLac** [2700]. **KGNav** [3480]. **Kill** [3522]. **killer** [1961]. **killing** [616, 1008]. **Kinematic** [4132]. **Kishu** [4038]. **Kit** [4355]. **KLL** [2581]. **knives** [809]. **KNN** [90, 1002, 664, 1902, 265, 84]. **Knob** [4103]. **Know** [3696, 2037]. **Knowledge** [4054, 2407, 3497, 1644, 1302, 3524, 4069, 3469, 3675, 4136, 1743, 3301, 3906, 4268, 3723, 3243, 1184, 4174, 3480, 3667, 3728, 2785, 3616, 3947, 3832, 4229, 3612, 3718, 2001, 1343, 2733, 1986, 872, 1907, 1814, 1805, 1408, 1675, 967, 1080, 613, 1801, 3080, 2163, 2824, 1498, 2175, 2303, 2855, 2390, 1218, 2337, 2790, 927, 1910, 1840, 2709, 2590, 3105, 1987, 1379, 488, 309, 2773, 1605, 1333, 1400, 772, 2429, 2557, 1591, 1202, 1984, 1658, 1522, 1937, 1576]. **Knowledge-based** [1302]. **known** [2471]. **Kodiak** [1558]. **Koko** [2005]. **Kolmogorov** [2610]. **Kora** [3455]. **Kosmix** [298]. **Krypton** [3433, 2199]. **KV** [3283, 1326].

L [2789]. **L2chain** [3240]. **LA3** [1903]. **Label** [3400, 3775, 3738, 2934, 1109, 794, 2321, 518, 2058, 2675, 2859, 817]. **Label-Constrained** [3775, 3738, 2934, 2321, 2859]. **Label-Efficient** [3400]. **labeled** [2643, 1779]. **Labeling** [673, 4211, 3742, 4113, 3907, 817, 1483, 2485, 2298, 1868, 1400, 1108, 2654]. **Labelling** [4023, 2986]. **labels** [2069, 2443, 57, 1091]. **labor** [2220]. **laboratory** [1165]. **labyrinth** [3115]. **Lachesis** [2585]. **Laconic** [254]. **Lahar** [319]. **Lake** [3236, 4312, 1986, 1786, 2222, 2747, 2201]. **Lakebase** [4375]. **LakeBench** [3688]. **LakeCompass** [3902]. **Lakehouse** [4299, 4273]. **Lakehouse-Native** [4299]. **Lakehouses** [3856, 3840]. **Lakes** [4360, 3550, 3902, 3688, 3422, 3295, 4227, 4005, 3310, 3912, 3973, 4213, 3795]. **LakeVisage** [4227]. **LANCET** [2654]. **Land** [3252, 2433, 2629, 84, 263]. **Language** [3487, 3550, 3512, 3526, 4346, 3351, 4350, 4340, 3750, 4224, 3416, 3715, 3281, 3910, 3629, 3891, 4118, 3676, 4359, 4208, 3968, 3463, 3793, 3784, 3969, 4164, 4362, 4248, 4120, 2597, 3857, 3580, 3763, 115, 4293, 3540, 3807, 3890, 3898, 4344, 3595, 3732, 3838, 3907, 4292, 1343, 18, 1595, 1676, 1997, 1751, 2004, 2387, 1077, 1199, 1227, 2487, 2242, 946, 1553, 2459, 992, 1156, 2564, 3035, 3132, 3030, 2764]. **Language-agnostic** [2597]. **Language-Driven** [4118]. **language-independent** [1156]. **Language-integrated** [115]. **Languages** [3286, 4330, 799, 2027, 2818, 353, 1557]. **LANNS** [2872]. **Lantern** [2203]. **Large** [4054, 3460, 1607, 3656, 3512, 3750, 3416, 3715, 3910, 3623, 3629, 3891, 4087, 3625, 4124, 3405, 1220, 4359, 4279, 4135, 3453, 3784, 3969, 3659, 4164, 1245, 3381, 4071, 3758, 4084, 3977, 2649, 3597, 3452, 4248, 3148, 3243, 530, 3665, 4003, 3857, 3447, 3866, 3592, 1128, 4035, 4283, 3763, 4282, 4293, 3540, 3807, 3542, 3445, 3796, 3890, 3783, 3950, 3728, 4072, 135, 3717, 3826, 3559, 3845, 3898, 4344, 3738, 4059, 3742, 3604, 4012, 3764, 3748, 786, 3334, 3320, 3732, 3765, 3838, 3907, 4292, 1831, 2251, 2072, 740, 2381, 79, 603, 2462, 878, 1573, 1814, 1050, 1965, 1846, 1135, 365, 37, 3173, 1927, 2934, 2927, 413, 313]. **large** [531, 543, 967, 1261, 1532, 1047, 1654, 1555, 1794, 1687, 2324, 3131, 2414, 2140, 602, 2824, 2343, 2065, 2765, 1125, 968, 1562, 1697, 581, 690, 2386, 2984, 1315, 2442, 1453, 1401, 1264, 2190, 2669, 2932, 2926, 2542, 301, 2606, 2242, 402, 830, 338, 1232, 2522, 80, 1726, 187, 390, 2956, 973, 773, 2371, 854, 1451, 1974, 2968, 1173, 1273, 2538, 1976, 1381, 1866, 1967, 1580, 992, 158, 1293, 1444, 2264, 1322, 643, 611, 2213, 2767, 2052, 1165, 1139, 2379, 2911, 2130, 1951, 3132, 2020, 30, 1633, 1847, 2265, 2124, 2500, 2400, 3175, 1992, 2721, 2707, 2061, 2817, 2560, 2599, 364, 1269, 639, 822, 1145, 2118, 2641, 1746, 445]. **large** [1194, 2077, 370, 820, 2901, 2447, 2611, 244, 3943]. **Large-Scale** [3623, 4087, 3625, 4124, 3453, 3659, 3381, 3452, 3447, 4035, 4283, 4282, 3445, 3728, 3717, 3826, 3845, 4059, 3742, 3604, 1607, 1245, 530, 3665, 1128, 135, 2251, 2072, 1573, 1814, 1050, 1965, 1135, 37, 1261, 1532, 1654, 2824, 2065, 1562, 2442, 1401, 2190, 2669, 301, 2242, 830, 1726, 2956, 1451, 1381, 1967, 992, 1322, 2052, 1165, 1139, 2130, 2265, 2124, 3175, 2721, 1145, 1746]. **LargeEA** [2824]. **Larger** [3802, 3207, 2598]. **Larger-Than-Memory** [3802, 3207, 2598]. **LASEK** [4355]. **Laser** [4021]. **lasso** [1647]. **Last** [2286, 1835]. **Last-mile** [2286]. **lasting**

[972]. **Latch** [4082, 1876, 565]. **Latch-Free** [4082, 1876, 565]. **late** [2053]. **Latency** [3313, 4249, 4123, 3578, 3586, 3384, 3244, 3875, 4298, 3470, 3450, 3839, 1376, 1972, 2451, 1955, 2704, 2768, 1483, 2114, 2341, 1321, 1558, 834, 2268, 2168, 1063, 2589, 2849]. **latency-conscious** [2114]. **Latent** [3958, 1514, 700]. **later** [726]. **lattice** [924, 226, 1544]. **LavaStore** [3829]. **law** [2755, 225, 4175]. **Lay** [3894]. **Layer** [3408, 3240, 3994, 2395, 2577, 43]. **Layer-2** [3240]. **layering** [2761]. **Layout** [3326, 2261, 2883, 2856, 2973]. **layouts** [1663, 2151]. **Lazy** [200, 4256, 265, 3545, 1733, 936, 916]. **Lazy-Adaptive** [200]. **LB** [2340]. **LDA*** [1746]. **LDBC** [1562, 4188, 3232]. **LDPTrace** [3308]. **leader** [1348, 3169]. **leaderless** [2910]. **LEADRE** [4268]. **Leakage** [3727, 2023, 630]. **leakages** [2994]. **Leaked** [3686]. **LeanStore** [3937]. **LEAP** [3984, 4016]. **Leaper** [2404]. **Learn** [3737, 3994, 2334]. **Learnable** [3604]. **Learned** [3432, 4347, 3299, 3687, 3362, 4258, 4365, 4310, 4021, 3679, 3415, 3661, 3558, 3332, 4162, 4241, 4179, 3207, 3205, 3297, 3151, 2813, 3316, 3409, 3964, 3477, 3613, 3417, 3319, 3602, 3800, 3202, 3390, 3521, 2489, 2346, 3014, 2988, 295, 2831, 2431, 2852, 2165, 2483, 2615, 3175, 3037, 2827, 2586, 2975, 2404, 3012, 3182, 2810]. **Learning** [3487, 213, 3833, 4131, 3442, 883, 4041, 3699, 3235, 3774, 3561, 3635, 3312, 3295, 3505, 3486, 3525, 4183, 3494, 4117, 4208, 709, 3922, 4201, 3401, 4160, 3347, 3756, 3463, 3608, 3936, 4136, 3322, 3661, 3241, 3546, 3328, 3659, 3639, 4063, 3572, 3929, 3534, 3479, 4030, 3597, 3562, 57, 2017, 1334, 4331, 3599, 3681, 3156, 3151, 3871, 634, 3508, 3364, 4283, 3615, 65, 3760, 3248, 2291, 3201, 3378, 3517, 3642, 4107, 4368, 3881, 2827, 3195, 3565, 3352, 3616, 4152, 4099, 3246, 4048, 3464, 4361, 3388, 3459, 3149, 3714, 3970, 3583, 3797, 3652, 3868, 4194, 4156, 4002, 3290, 3971, 4228, 3276, 3617, 4057, 4052, 3698, 3089, 2832, 2987, 900, 2794]. **learning** [1050, 1571, 1965, 3178, 2244, 1610, 2906, 2361, 2989, 1675, 2226, 2170, 2530, 2507, 2024, 1532, 2701, 2969, 2868, 4165, 3119, 949, 2047, 2809, 2101, 2582, 2432, 2875, 2842, 2780, 2300, 652, 2067, 2180, 2014, 2143, 2801, 2693, 1386, 2154, 3048, 1806, 1880, 1887, 2235, 2630, 2648, 2777, 2669, 3111, 1926, 2510, 2580, 2716, 2836, 632, 1560, 2402, 1517, 1232, 2756, 2417, 2550, 2644, 2474, 289, 2169, 2374, 3031, 1608, 2430, 3187, 2221, 2189, 1862, 2739, 2687, 2520, 1139, 2285, 2679, 2019, 2546, 2837, 2933, 2583, 2803, 2051, 2100, 2428, 2799, 3168, 2464, 2710, 2057, 2412, 1990, 2074, 2688, 3123, 2963, 2551, 3020, 2591, 2929]. **learning** [2805, 2625, 2696, 936, 2978, 2683, 1197]. **Learning-Based** [4183, 4208, 3149, 2989, 2047, 2648, 1517, 2285, 2583, 2683]. **learning-enhanced** [2933]. **Learning-to-Rank** [4030, 3276]. **learning-to-transform** [2432]. **Least** [3645, 1038]. **Leave** [1618]. **Ledger** [3268]. **Ledgers** [3734, 2529]. **LeeWave** [49]. **legacy** [2881]. **LEGO** [4207]. **LEGO-GraphRAG** [4207]. **Legos** [3527]. **LEGOStore** [2976]. **Leitmotifs** [3993]. **lemonade** [2018]. **Lempel** [594]. **Length** [3943, 4255, 3703, 2039]. **Length-Aggregation-Based** [3943]. **Lens** [3936, 3414, 2925]. **Lenses** [1356]. **LensXPlain** [2200]. **LEON** [3336]. **Leopard** [1497]. **Lernaean** [2050, 2292]. **Lero** [3276]. **Less** [782, 3982, 914, 1388, 2647]. **lessons** [2252, 295]. **Let** [3706]. **LETIndex** [4347]. **Level** [4166, 4225, 3756, 3392, 3856, 3244, 4018, 3369, 288, 1630, 1077, 1199, 3231, 3758, 49]. **level-wise** [49]. **LevelGraph** [1578]. **Levels** [4176, 4199, 2384, 238]. **leverage** [3089]. **Leveraging** [1930, 3547, 4168, 4094, 3196,

3384, 3360, 3257, 4248, 4004, 2837, 1705, 3667, 1489, 1310, 1228, 2816, 1529, 1508, 1558, 1379, 1648, 1715]. **Lewis** [2728]. **LFTF** [1690]. **liberating** [1403]. **LIBKDV** [3091]. **librA** [1970]. **Library** [4340, 3984, 3909, 4156, 3091, 718, 2722]. **LIDER** [3175]. **Life** [4069, 3553, 4327]. **Life-Cycle** [4327]. **Lifelong** [4132]. **Lifetime** [1530, 4057, 2778]. **Lifetime-based** [1530]. **lifted** [1274]. **Lifting** [1659]. **LightDB** [1924]. **LightDiC** [3659]. **Lighter** [4240]. **Lighter-X** [4240]. **Lightning** [1441, 1710, 3824]. **Lightweight** [4066, 4141, 4088, 791, 3999, 4243, 1048, 4247, 792, 491, 1589, 555, 2117, 2562, 1497, 2479, 2228, 2498, 1660, 2603]. **Lightweight-to-Powerful** [4141]. **Like** [4353, 3527, 3341, 4295, 1525, 386, 1718, 1096, 1303, 1052, 2802, 1018]. **Limit** [3405, 2301, 3675]. **Limitations** [4059, 1017, 2323]. **Limited** [3380, 4213, 3371, 1037, 452]. **Limits** [4150, 1134, 2701, 2773]. **LINC** [2274]. **Lindorm** [3853, 3447]. **Lindorm-UWC** [3853]. **Line** [3943, 3879, 2545, 327, 1508, 2505, 1786, 1991]. **lineage** [1778, 2569, 1888, 66, 2730]. **Linear** [3382, 3625, 3226, 3309, 4163, 3150, 3307, 1903, 1730, 561, 1532, 182, 374, 2399, 2034, 2100, 2400, 2622, 3166, 2290]. **Linearizable** [4175, 4145, 2976]. **Linearized** [1270]. **Lingua** [3512]. **lingual** [1178]. **linguistic** [2850]. **Link** [4216, 4174, 1903, 35, 3081]. **link-** [1903]. **Linkage** [3376, 3549, 1062, 377, 816, 378, 709, 2842, 379, 314]. **linkages** [1782]. **linked** [1871, 1544]. **LinkedIn** [1765]. **Linking** [4147, 2694, 873, 766, 2337, 716, 931]. **LINQ** [354, 482]. **LION** [883, 3638]. **lipstick** [601]. **LiSA** [1178]. **List** [4077, 2042, 81, 2682, 240, 1699, 2240, 2336]. **list-based** [2682]. **listing** [2444]. **lists** [553, 260, 194]. **lite** [1873]. **LITS** [3800]. **Live** [3941, 1375, 3552, 555, 2085, 2514, 931].

LiveGraph [2336]. **LLAMA** [852]. **LlamaTune** [3033]. **LLM** [4355, 4276, 4168, 4161, 3984, 4275, 3860, 3784, 3969, 4268, 4369, 4004, 4282, 4288, 4197, 4218, 3559]. **LLM-Assisted** [4355]. **LLM-Based** [4161, 4288]. **LLM-Driven** [4197]. **LLM-Enhanced** [4218]. **LLM-PBE** [3784]. **LLM-Powered** [3984, 4275]. **LLM-R** [3969]. **LLMLog** [4197]. **LLMs** [3884, 4311, 3522, 4126, 4141, 3912, 4142, 3927, 3919]. **LLUNATIC** [831, 1146]. **LLVM** [1590]. **LLVM-based** [1590]. **LM** [3622]. **LM-SRPQ** [3622]. **LMSFC** [3362]. **Load** [3978, 3339, 2093, 2848, 2495, 2995]. **Load-Balanced** [3978, 2995]. **Loading** [3561, 3306, 3919, 975, 3036]. **LobRA** [4159]. **Local** [3251, 4094, 2524, 1691, 4175, 3691, 3360, 2606, 2045, 4155, 4145, 3829, 3771, 3556, 3361, 2662, 2123, 2646, 2665, 2969, 248, 513, 2399, 1539, 537, 1230, 2351, 2913, 1289, 2191, 2460, 698, 2513]. **Locality** [4177, 3231, 1959, 3549, 3712, 1903, 1476, 1452, 541, 1828, 608, 994]. **Locality-Aware** [4177, 1903]. **Locality-Sensitive** [3549, 3712, 1959, 1452, 994]. **localization** [2509]. **localized** [926]. **Locally** [3308, 3682, 699, 11, 3015]. **located** [1927]. **Locater** [2509]. **locating** [1175]. **Location** [1619, 2192, 1753, 1006, 477, 706, 575, 1335, 1713, 395, 472, 1084, 2947, 87, 1798]. **location-based** [2192, 1006, 477, 1713, 2947]. **locations** [430]. **LocationSpark** [1602]. **lock** [210, 1332, 1883, 1489, 2898]. **lock-free** [1332, 2898]. **Locking** [192, 2256, 791, 1121, 1090]. **LocLok** [1798]. **Log** [4178, 4078, 4258, 3981, 4243, 4197, 4259, 2548, 1869, 2040, 44, 725, 656, 3028, 1048, 1865, 2055, 1211, 3073, 2414]. **Log-Based** [4259, 1211]. **log-free** [2548]. **LOG-Means** [2414]. **Log-Structured** [4178, 4258, 1869, 2040, 44, 656, 3028, 1048]. **Logarithm** [4039]. **LogBase** [656]. **LogCIoud** [4140]. **LOGER** [3299].

Logging [3825, 3553, 3543, 1656, 2536, 1254, 401, 1845, 471, 724, 1873, 211, 121, 1078, 1363, 2498]. **LogGP** [1211]. **Logic** [3900, 4019, 3685, 4134, 3472, 1364, 544, 2184, 1238]. **Logical** [3340, 1912, 549, 1359, 1477, 633]. **LogicBlox** [1375]. **Logician** [4349]. **Logician-Friendly** [4349]. **Logistics** [3561]. **LogLite** [4243]. **Logs** [3977, 3443, 3506, 4140, 8, 1846, 119, 2837]. **Long** [3325, 4168, 4137, 4269, 387, 1257, 1743, 330, 576, 851, 2912, 647]. **Long-Running** [4137, 4269, 387]. **long-tail** [1257, 1743]. **longest** [972, 1643]. **longest-lasting** [972]. **Longshot** [3317]. **Look** [4295, 339, 1432, 2771]. **Looking** [3882, 1702, 1432]. **lookup** [2872]. **Loop** [3536, 4244, 3930, 112, 1825, 2703, 2174, 612, 3084, 1990]. **loops** [2352]. **loose** [461]. **loosely** [1550]. **LoRA** [4109]. **Loss** [3631, 3770, 2365, 268, 2644]. **Lossless** [3650, 3298, 2974, 3041, 2482]. **Lossy** [3217, 4146, 2875]. **Lotan** [3372]. **Lotus** [3032]. **Low** [4249, 2704, 3578, 4141, 834, 1063, 3875, 4298, 3565, 3470, 3450, 4016, 685, 3718, 1886, 1192, 1972, 2451, 2421, 2768, 1483, 2577, 2035, 2341, 1558, 960, 2168, 1763, 2962, 3192, 1130, 1494, 1510, 2849]. **Low-Cost** [4141, 4016, 3718]. **Low-Latency** [3578, 3875, 3470, 2704, 834, 1063, 2768, 1483, 1558, 2168]. **low-memory** [1886]. **low-overhead** [2035, 2962]. **low-power** [1130, 1510]. **Low-rank** [685]. **Low-Resource** [3565, 3192]. **Lower** [4123, 4007, 3318, 1466, 802]. **Lowering** [2268]. **LRU** [3344]. **LRU-C** [3344]. **LSH** [1066, 1828, 3150, 2789, 3712, 2309, 1551]. **LSM** [2362, 2967, 1973, 3042, 4077, 2931, 3384, 2080, 2295, 2502, 2659, 2633, 2404, 4046, 2973, 4057]. **LSM-based** [2362, 2967, 2080, 2295, 2502]. **LSM-Tree** [4057, 3042, 2633, 2404, 2973]. **LSM-Trees** [4077, 4046]. **LucidScript** [3886]. **Lusail** [1871]. **LUW** [292]. **Lux** [2862]. **Lyapunov** [3405]. **Lynx** [3475].

M2Bench [3221]. **M3R** [721]. **M4** [1071]. **MaaT** [1030]. **Mach** [3913]. **Machine** [3487, 4131, 3442, 1610, 3235, 3774, 3486, 3525, 3494, 3228, 4201, 2780, 4160, 3608, 3661, 2777, 4151, 3534, 3928, 4022, 3479, 2221, 3681, 3875, 3156, 3766, 3151, 4283, 3642, 4368, 3128, 3881, 3195, 4361, 3448, 3459, 3797, 4002, 3329, 3617, 3089, 900, 1050, 1571, 1965, 2244, 2361, 1432, 2024, 1532, 2701, 2704, 2356, 2101, 2582, 2067, 2180, 1386, 2154, 1806, 1880, 2630, 2669, 1926, 632, 1560, 2756, 3008, 3031, 2773, 2189, 2739, 2687, 1139, 2837, 2583, 2803, 2051, 3168, 2131, 2710, 1990, 2074, 3123, 2963, 2591, 1090, 2805]. **machine-generated** [2131]. **Machine-Learning-as-a-Service** [3479]. **Machines** [4078, 807, 2658]. **macrobenchmarks** [2070]. **macrotask** [1362]. **MAD** [294, 2765, 718]. **Made** [4315, 4220, 4073, 1581, 735, 905, 1325, 2286, 1773, 912]. **MADlib** [718]. **Magellan** [1552, 1606]. **Magic** [2982, 3882, 2433]. **MagicScaler** [3454]. **MAGiQ** [1995]. **Magma** [3075]. **Magneto** [4164]. **Magnus** [4283]. **MAGS** [3931]. **Main** [3260, 51, 308, 661, 1009, 161, 1541, 956, 1288, 521, 614, 2517, 2308, 563, 1276, 140, 1546, 952, 597, 1613, 3026, 1463, 2548, 1492, 975, 1726, 1344, 1631, 791, 1229, 887, 990, 1117, 2271]. **Main-Memory** [3260, 51, 308, 1009, 161, 1541, 614, 2517, 2308, 563, 597, 1613, 1492, 1344, 1631, 887, 1117, 2271]. **Mainlining** [2525]. **maintained** [3051, 1189]. **Maintaining** [4198, 16, 3662, 538]. **Maintenance** [3286, 3902, 3357, 3585, 4113, 620, 1534, 266, 522, 1456, 2542, 2025, 80, 2306, 2450]. **majority** [2254]. **Make** [2783, 1180]. **makes** [1702]. **makeup** [924]. **Making** [3233, 3892, 136, 2208, 836, 4195, 2885, 3991, 862, 3417, 697, 2720, 386, 1086, 764, 1835, 1873, 1734, 2752, 3071, 1702]. **mammals**

[330]. **Mammoths** [3611]. **Manage** [765]. **managed** [1100, 2769, 2597]. **Management** [3953, 3831, 3780, 3847, 4276, 4000, 3416, 4374, 4092, 4308, 4110, 3536, 3476, 3860, 3820, 4010, 4291, 3431, 4274, 3865, 3368, 3869, 4363, 3863, 4283, 3542, 4367, 4368, 3485, 3895, 4210, 3896, 3637, 3797, 4093, 3594, 4286, 2013, 1294, 739, 1076, 495, 147, 2248, 1611, 1954, 1772, 2028, 1753, 1983, 895, 995, 6, 1893, 874, 2029, 2723, 278, 3079, 2392, 2682, 1079, 2266, 1114, 714, 1960, 1979, 3127, 2529, 1552, 1606, 599, 1802, 2795, 2223, 351, 824, 2197, 1530, 2228, 662, 2502, 120, 3044, 2086, 2576, 1517, 893, 1619, 732, 511, 2222, 1767, 1726, 3139, 2436, 1012, 720, 2255, 2216, 716, 2009, 150]. **management** [154, 335, 2472, 723, 1512, 1602, 3132, 2583, 315, 1300, 3062, 83, 1082, 2498, 1170, 1931, 1074, 1127, 1978, 2201, 110]. **Manager** [3363, 3451, 1796, 1657]. **managers** [329]. **Managing** [3780, 4069, 73, 2774, 178, 923, 1085, 2765, 1088, 307, 1177, 1783, 773, 30]. **Manga** [3512]. **Manifesto** [3368]. **manifold** [2250]. **Manipulation**

014, 1880, 1283, 1512]. multi-truth [1882]. Multi-tuple [963].

[4312, 3973, 4352, 754]. **Manu** [3079]. **Manual** [3689, 2575]. **Manual-Reading** [3689]. **many** [1919, 1869, 2551]. **many-core** [1869, 2551]. **ManyAspects** [127]. **Manycore** [2454]. **Map** [4017, 4156, 2712, 464, 2664, 932, 802, 1097, 323, 2702, 1141, 288]. **map-reduce** [802, 1097, 323, 288]. **MapMerge** [347]. **mapping** [133, 22, 2082, 2979, 464, 1580, 2546]. **mappings** [347, 255, 2082, 784, 456, 262, 312, 254]. **MapRat** [761]. **MapReduce** [247, 863, 1813, 610, 1131, 1667, 2097, 469, 727, 552, 768, 902, 1394, 621, 1918, 548, 287, 545, 581, 382, 622, 1350, 748, 1305, 728, 351, 658, 1282, 672, 735, 657, 1201, 631, 384, 1022, 289, 1000, 1341, 1120, 1444, 769, 1133, 425, 1014, 671]. **MapReduce-based** [735]. **MapReduce-style** [728]. **maps**

[272, 1597, 1764]. **Mariana** [1197]. **Marigold** [3296]. **Marius** [2721]. **market** [2220, 297, 2401, 1700, 1659]. **marketing** [1291]. **Marketplace** [3520, 2022, 1697, 2718, 2558]. **Marketplaces** [3915, 2068]. **Markets** [3461, 3420, 3047, 755, 1262]. **marking** [1596]. **Markov** [409, 2657, 544, 2184, 1798, 843]. **Markovian** [319]. **MarkoViews** [669]. **marriage** [1642]. **Marriages** [3411]. **mashed** [368]. **mashed-up** [368]. **Mashup** [317, 757]. **mashups** [215, 414]. **Masked** [4008, 4025]. **Masks** [3881]. **MaskSearch** [3881]. **mass** [1299, 877]. **masses** [2681, 2248]. **Massive** [3953, 3670, 4212, 4023, 741, 3766, 242, 1748, 1376, 2370, 103, 2356, 1382, 1456, 1850, 3017, 1445, 468, 1757, 178, 716, 640, 2311, 2486]. **massive-scale** [1376]. **Massively** [661, 501, 2617, 289, 275, 2307]. **Master** [3430, 4021, 1087, 355, 732, 315, 3169]. **Master-Standby** [4021]. **MASTRO** [923]. **match** [383, 244, 3753].

n [290, 120]. NADEEF [899]. naive [268]. Name [886]. Names [3540]. nanoseconds [1961]. Napa [2759, 3429]. NashDB [2183]. Nationwide [3561]. Native [3925, 4214, 3846, 3702, 3828, 4184, 3431, 4299, 3455, 4273, 3447, 2229, 3836, 3485, 3620, 3861, 3450, 3437, 4323, 4296, 3849, 3079, 2247, 2563, 2960, 2211, 3074, 2874]. Natural [4346, 4224, 3281, 4118, 3463, 2387, 3793, 4362, 4120, 3580, 3595, 1343, 1595, 1676, 1997, 2024, 2004, 1227, 1553, 2459, 2564, 3035, 3030]. Navigating [368, 3879, 3115, 2075, 1580]. Navigation [4225, 1409, 327, 1411, 1537, 1233, 1782]. Navigational [3480, 1427]. NBTree [2898]. Near [4167, 2960, 2365, 2695,

2895, 828, 33, 1115, 1771, 1406, 2439, 2776, 3166, 2290, 266]. Near-data [2960]. near-linear [3166, 2290]. near-maximum [2439]. NEAR-Miner [266]. near-optimal [2895, 33]. near-zero [2365]. Nearest [3749, 4096, 4026, 4225, 4087, 2503, 3590, 4049, 4039, 395, 4206, 3950, 3712, 87, 4100, 3315, 4287, 3365, 1493, 1476, 570, 29, 1692, 1490, 1222, 2872, 2075, 2369, 1452, 2158, 1066, 657, 2366, 2825, 1019, 429, 854, 449, 1221, 2640, 264, 263, 1272, 2828]. nearest-neighbor [2828]. nearly [2626]. NebulaStream [3476]. NED [1686]. Need [3325, 4168, 4163, 1075, 1033, 2584]. needs [1535]. negation [683, 2773]. Negative [4303, 2733]. Negatively [4316]. Neighbor [3749, 4096, 4026, 4225, 4087, 4039, 1464, 4206, 3712, 4239, 87, 4100, 3315, 4287, 3365, 1476, 570, 1692, 1490, 1222, 2872, 2075, 2369, 1452, 2158, 2503, 1231, 1066, 657, 2366, 2825, 1019, 395, 449, 1221, 2640, 264, 2828]. Neighbor-sensitive [1464]. Neighborhood [3321, 3963, 1173, 1091, 517]. Neighborhood-Based [3321]. neighborhood-centric [1173]. Neighborhood-Preserving [3963]. Neighborhoods [4256]. Neighbors [3590, 4049, 3950, 1493, 29, 429, 1331, 263, 1272]. NeMa [794]. Nemo [3162]. Neo [2165]. Nephele [501]. Nested [3795, 2714, 2673, 2152, 353, 2459, 2518, 2713]. net [1479, 462]. NET-FLi [462]. NetEase [1195]. Netherite [2930]. NETS [2136]. Network [4055, 3638, 3218, 4306, 3625, 4236, 3654, 3147, 4167, 3987, 3587, 3557, 3909, 3232, 3773, 3728, 3194, 3664, 163, 234, 2604, 3025, 2958, 1897, 2823, 462, 2562, 2508, 2395, 2814, 3119, 2614, 1761, 2301, 2910, 1175, 706, 3027, 301, 1601, 3052, 122, 2167, 1908, 2649, 3008, 2371, 1733, 3016, 772, 59, 2311, 2486, 322, 1171, 1758, 2652, 786, 2901, 2233, 2290, 249]. network-aware [1733]. network-based [2301]. network-enhanced [322]. networking [893, 325, 1170]. Networks [3203, 3596, 3407, 4202, 4211, 3799, 3623, 3669, 3751, 3761, 3625, 3379, 4117, 3467, 3266, 4023, 3697, 4008, 3348, 3427, 3392, 4084, 3197, 3866, 4327, 3355, 3796, 3775, 3950, 4072, 3620, 4037, 3269, 3334, 4172, 3320, 3765, 1493, 2413, 2370, 1496, 303, 568, 1021, 1927, 2845, 2119, 94, 2540, 778, 1680, 1766, 2403, 2324, 813, 2012, 12, 1456, 2993, 910, 968, 1220, 1475, 3177, 2386, 1109, 2984, 2902, 1453, 222, 2419, 1034, 1264, 2423, 2338, 2578, 3055, 1713, 756, 1879, 453, 1279, 544, 1542, 2306, 1915, 2956, 472, 2968, 518, 1471, 2184, 2579, 271, 325, 1727, 1059, 2767, 605, 3137, 3013, 3023, 2899, 2546, 257, 640, 1307, 1633]. networks [2132, 2124, 606, 1992, 2560, 2599, 184, 1269, 524, 2641, 2929, 2160, 1682, 1712, 2859, 2680, 3009, 370, 3071, 1310, 2447, 2378]. NeuChain [3005]. Neural [4055, 3407, 4306, 4202, 3623, 3751, 3625, 3654, 3266, 3697, 4008, 4167, 3427, 3987, 3302, 3866, 3728, 3620, 4037, 3790, 3334, 4172, 2845, 2823, 2540, 2562, 2012, 2395, 2814, 2993, 2902, 1761, 2301, 2939, 3055, 2850, 2167, 3008, 2956, 3016, 2867, 2564, 2546, 2929, 2889, 2680, 2901, 3071, 2233]. NeuroCard [2488]. NeuroFlinkCEP [4335]. Neurosymbolic [4335]. NeutronOrch [3693]. NeutronStream [3577]. NeutronTask [4091]. NeutronTP [3978]. News [3876, 2223, 1406, 932, 811]. NewSQL [1163]. Next [882, 3933, 3898, 3790, 2847, 3077, 1619, 1041, 909, 2209].

next-generation [3077, 1041, 909, 2209]. Nezha [3212]. NFL [2975]. NFV [1769]. NG [1641]. NG-DBSCAN [1641]. Niches [3146]. NISQ [4092]. Nitro [1570, 3970]. NL2SQL [4168, 3750, 4051]. NLC [2912]. NLIDB [2850]. NLIDBs [2546]. NLP [2575]. NLP-enhanced [2575]. NLProv [1595]. NLproveNAns [1997]. NN [3799, 1231, 1879, 49, 2309]. No [3154, 1618, 630, 2860]. no-code [2860]. NOAH [2559]. NoDA [2744]. NoDB [750]. Node [4204, 3842, 3389, 3731, 1908, 1007, 638, 2834, 1003, 1686]. node-pair [1003]. nodes [2750, 1286, 2378]. NoETL [2249]. NoFTL [914]. Noise [3989, 3979, 4147, 4052]. Noise-Free [4147]. noisy [2620, 2284]. NOMAD [1090]. nominal [85]. Non [4178, 3275, 4068, 3401, 3645, 1623, 3543, 1775, 1876, 1263, 1288, 450, 1997, 2524, 2326, 3063, 61, 2902, 1600, 1989, 2548, 515, 141, 1078, 1090, 96, 171, 3182]. non-answers [1997, 61, 1989, 515]. non-attributed [2902]. non-convex [141]. Non-Deterministic [4068]. non-graph [1600]. Non-invasive [3645, 1623]. Non-Learning [3401]. non-locking [1090]. non-metric [450, 171]. non-numeric [2524]. non-redundant [96]. non-uniform [2326]. Non-Volatile [4178, 3275, 3543, 1775, 1876, 1263, 1288, 3063, 2548, 1078, 3182]. nonlinear [1443]. normal [589]. Normalization [262]. Normalized [3398, 1730, 1386]. Normalizing [3395, 2812]. Northstar [2032]. NoScope [1761]. NoSQL [2125, 950, 719, 2249, 2744, 1570, 3846, 1045, 771]. notebook [2569]. Notebooks [3552, 4038, 3158]. nothing [1118, 1507, 1353]. Nothing/Shared [3448]. Noticeable [1908]. noticing [386]. Novel [4261, 3715, 3362, 4135, 3479, 3377, 2987, 2875, 806, 1059]. nowcasting [934, 1640]. noWorkflow [1783]. NScale [1173]. nsDB [3790]. nucleus [2851]. Nuhuo [3664]. Null [4180]. nulls [3007]. NUMA [2319, 1344, 1631]. NUMA-aware [2319, 1344, 1631]. Number [4048, 1720, 2414, 2827]. numbering [155]. numeric [2524]. Numerical [4131, 182, 2582]. nurturing [1421]. NV [3275]. NV-SQL [3275]. NVM [2778, 3350]. NVMe [3323, 3937]. NVRAM [1254, 1012]. NVRAM-aware [1254]. NVRAMs [2377].

O [1514, 3323, 1622, 4356, 862, 771, 1495, 3738, 636]. O-efficient [2932]. OASIS [1739, 3687]. obfuscation [687]. Object [3375, 4119, 4140, 3920, 440, 280, 156, 406, 591, 316, 730, 405, 575, 644, 1019, 256, 1158, 1372, 2849]. object-centric [1372]. object-oriented [316, 256]. Objective [4000, 4258, 4331, 2636, 1240]. ObjectRunner [491]. Objects [4006, 3413, 3335, 1299, 864, 373, 743, 2989, 198, 269, 372, 765, 270]. ObliDB [2275]. Oblivious [3382, 4017, 3541, 1545, 3347, 3515, 3291, 3229, 3529, 4189, 4062, 2275, 2116, 838, 2415]. Obscure [2116]. Observability [3156]. observational [1812, 1048, 1625]. Observations [3390, 2092, 2504]. observatory [767, 1164, 3607]. observing [3104, 381]. obtaining [2059]. occlusion [2199]. occlusion-based [2199]. Ocean [2148]. OceanBase [3066, 3448]. OceanST [1145]. Ocelot [1157]. Ocelot/HyPE [1157]. OCR [599]. OctopusFS [1979]. ODIN [2438]. odyssey [2785, 3252, 885, 3510]. OEBench [3640]. Off [3292, 4138, 2011, 3106, 1659, 2668, 2493]. Off-Chain

[3292, 2668]. Off-the-Shelf [4138]. Offloading [3277, 3248, 1089]. offs [2980]. OFL [3922]. OFL-W3 [3922]. okay [535]. OLAK [1682]. OLAP [3801, 4294, 139, 1762, 2016, 2323, 733, 2230]. Old [3553, 2955, 2026]. Olive [3347]. OLTP [3275, 1844, 4103, 1025, 4294, 210, 1762, 2548, 2409, 2541, 565, 579, 693, 1966, 2384, 1489, 2633, 1931]. OLTP&OLAP [691]. OLTP-Bench [1025]. OLTP/OLAP [1762]. OLTPshare [1966]. OLxP [1369]. OM [4004]. Omid [1968]. OmniDB [938]. OmniSketch [3567]. on-chain [2951]. on-chip [202]. On-Demand [3500, 4149, 4326, 3034, 3644, 2802, 2923, 1356]. On-Device [3747]. on-line [2545, 327]. On-off [2493]. on-road [1735]. On-the-Fly [3481, 190, 378, 462, 2067, 1840]. once [435]. One [1377, 3271, 3922, 1698, 3791, 883, 2672, 616, 2965, 1008, 1914, 2629, 913, 994, 2100, 2707, 2488, 1239, 1660, 3150]. One-pass [1698, 2672]. One-Shot [3271, 3922, 2965]. one-size-fits-all [2100]. one-stop [2707]. OneProvenance [3443]. OneShotSTL [3271]. ONIAK [3150]. Online [1278, 2258, 182, 1484, 3271, 3174, 3436, 80, 3227, 3733, 866, 1013, 1540, 3152, 2131, 3845, 4058, 3603, 926, 306, 2220, 1774, 297, 1913, 1131, 568, 1021, 2232, 2761, 1040, 1125, 2922, 2506, 755, 1313, 2068, 742, 795, 1279, 547, 275, 1348, 1740, 2803, 1459, 2565, 207, 1164, 3167, 1637, 1253, 1310, 1228, 2378]. OnlineSTL [2916]. Only [705, 3398, 191, 2185]. onslaught [719]. onto [2881]. Ontological [3153, 4174, 1549, 389]. Ontologies [146, 313]. Ontology [1154, 3264, 2128, 4004, 923, 2193, 1046, 949, 1553]. Ontology-based [2128, 923, 949].

ontology-driven [1553]. OpBoost [3179]. Open [4338, 3640, 759, 3715, 4364, 3396, 4362, 2030, 4300, 739, 1210, 881, 880, 1146, 770, 2990, 3134, 3127, 1186, 1614, 3130, 2722, 1895, 1782]. Open-Source [3715, 2722]. openclean [2722]. OpenDBML [3486]. OpenFGL [4063]. OpenForge [4181]. openGauss [2762, 2717]. Opening [4310, 677]. OpenMEL [4147]. OpenML [2803]. Operating [3314, 2808]. Operation [3391, 2054, 2783]. Operational [1611, 4375, 1568]. Operationalizing [2299]. Operations [4360, 4026, 3856, 3636, 3206, 2094, 2979]. Operator [3669, 3478, 1965, 193, 1126, 3014, 1402, 1835, 833, 3090, 877]. Operators [3428, 3229, 2681, 2820, 2288, 911, 2893, 633]. Operon [3062]. opinion [1262]. opinions [904]. opportunistic [1038]. Opportunities [3342, 4366, 2308, 3461, 2255, 3468, 3861, 2220, 3141, 878, 1534, 881, 715, 3135, 2467, 1079, 2778, 777, 2247, 3129, 2222, 2384, 2323]. Optane [2356]. Optimal [2261, 4144, 1266, 3687, 3746, 424, 1119, 1061, 665, 2126, 2376, 1297, 3378, 3517, 238, 3757, 3705, 4128, 3591, 1886, 1913, 667, 2895, 828, 2398, 33, 420, 2078, 3026, 2612, 1442, 1739, 1914, 2164, 2410, 1285, 3008, 1881, 1626, 1233, 1060, 2900]. Optimality [226, 1955]. Optimally [4334, 2674]. optimism [2308]. Optimistic [3250, 2054, 2084, 1632, 1494]. optimizable [1751]. Optimization [3780, 3432, 3965, 47, 2552, 3342, 676, 3576, 3313, 3336, 860, 3404, 1368, 3394, 4365, 2047, 1546, 3689, 3223, 3453, 3538, 4162, 4167, 3630, 4030, 1022, 3161, 3363, 4189, 3752, 4293, 3760, 3854, 3946, 3868, 883, 859, 1738, 1753, 253, 2226, 2170, 1374, 2820, 1039, 262, 19, 677, 545, 2990, 2150, 5, 1934, 3055, 635, 1536, 36, 2689, 3044, 419, 453, 2879, 980, 1345, 1909, 844, 1711, 1867, 1638, 596, 2769, 1348, 2280, 1120, 2887, 1023, 1240, 1506, 1507, 3035, 2837, 1014, 2496, 2400, 2799, 2074, 753, 1623, 2946, 370]. Optimizations [3859, 3704, 284, 1777, 1311, 2349, 2757, 2042, 2317, 619, 1329]. Optimize [4254, 3257, 1427, 376, 2973]. Optimized [4082, 3160, 3802, 4126, 4119, 3626, 3597, 4335, 3800, 3792, 4002, 4287, 200, 1157, 2869, 956, 2815, 1085, 3021, 42, 2979, 1834, 2784, 577, 2669, 2417, 2550, 2199, 2495, 1950, 3028]. Optimizer [3299, 3661, 4356, 3811, 3850, 3613, 3417, 4016, 4089, 3149, 3276, 110, 253, 1569, 108, 928, 3117, 474, 442, 672, 2165, 2484, 2057, 2209, 2683]. Optimizers [3474, 3776, 4372, 3390, 341, 2288, 1469, 1113, 879]. Optimizing [2574, 2966, 3051, 3222, 3788, 2545, 2458, 3469, 3675, 4201, 2300, 2354, 1207, 3534, 1925, 3810, 2164, 3198, 1052, 1113, 4095, 3905, 3378, 3542, 3517, 3642, 3195, 2622, 2963, 3816, 636, 4148, 2446, 1965, 3070, 861, 2418, 1761, 2301, 2490, 1458, 1386, 2154, 1463, 2340, 1879, 579, 1760, 2373, 685, 1528]. optimum [161]. option [2127]. options [2127]. OptScaler [3851]. Oracle [3859, 3618, 1484, 998, 1007, 2620, 864, 284, 871, 1780, 4280, 302, 1374, 112, 106, 296, 1361, 3456, 283, 110]. Oracles [3677, 1395, 2069, 2983, 271]. ORAM [4231]. ORBITS [2506]. Orchestrating [4044, 2998]. Order [3959, 3402, 3645, 3719, 3410, 4218, 3464, 1898, 4148, 653, 1376, 2109, 2473, 350, 25, 2791, 2932, 3179, 674, 988, 1688, 2382, 2126, 1629, 96]. Order-Fairness [3719]. Order-Preserving [3402, 2791, 3179]. order-revealing [2109]. ordered [2907, 2999, 451]. Ordering [2444, 3581, 999, 1265, 2991, 3005, 1013]. Orders [3312, 3378, 3517]. OREO [3082]. organization [1973]. organizational [2727]. organizations [956]. Organizing [4317, 141, 716]. Oriented [3407, 3823, 4231, 3289, 3533, 4102, 4111, 336, 1395, 1423, 300, 3094, 327, 548, 316, 2517, 1497, 1071, 23, 132, 3055, 475, 2649, 423, 2808, 1663, 256, 1307, 3074]. Origami [2826]. Orleans [3823]. OrpheusDB [1723]. OSSInsight [3887]. OtterTune [1978]. our [2954]. out-of-core [1711, 3766]. Out-of-Memory [4250, 2492]. Out-of-Order [3959, 3410, 2473, 25, 1376, 2126]. out-of-the-box [2988]. Outback [3990]. outcomes [1226, 1779]. outdoor [2195, 2173]. outer [286]. outlets [1156]. Outlier [3663, 3752, 3206, 2853, 1160, 2108, 2922, 470, 1543, 2494, 2136]. outliers [2097, 1691, 2177, 1322, 825]. Outlining [3965]. Output [231, 526, 71, 1760, 452]. outputs [1547, 3181]. OUTRE [3766]. outsourced [237]. outsourcing [267]. over-booking [1556]. over-subscribed [3003]. Overcoming [3391, 4059, 3017]. overhead [2421, 3122, 2577, 2035, 2962]. overlapping [846, 1013]. Overlooked [3611]. overtakes [2078]. Overview [874, 3864, 3869, 2220, 1187]. overviews [2559]. OWL2 [1218]. OWL2-EL [1218]. Ownership [4214, 3062]. ownership-preserving [3062]. oxymoron [1]. Oze [4137].

P [2844, 120, 3674, 1588]. P-regions [2844]. P-Shapley [3674]. P2P [123, 495, 122, 121]. P2PDocTagger [495]. PACk [2894]. Package [3630, 1500, 935]. PackageBuilder [1153]. packages [1153, 1213]. PACTs

[501]. paddling [1786]. Paetica [3448]. Page [3418, 18, 626, 2991, 565, 376]. PageRank [527, 1842, 3266, 3713, 1094, 1296, 2264, 2913, 3389, 2311, 819, 2617, 1645]. Pages [3400, 2406]. pain [1429]. pain-free [1429]. PAINE [3469]. pair [631, 1003]. Paired [3782]. pairs [592, 2912, 2371, 1269]. Pairwise [4016, 2299, 1334]. PairwiseHist [3651]. PALEO [1592]. PALF [3825]. Panakos [3263]. PANDA [1992, 2715]. Pando [3340]. Panel [778, 3522, 3933, 3140, 2033]. Pangea [259, 2091]. Pangolin [2348]. Panorama [3278, 2297]. Pantheon [3213]. paper [342, 1201, 1082]. papers [2722]. PAQO [928]. Parachute [4209]. paradigm [2931, 1298]. paradigms [2027]. PARADIS [1351]. Parallel [3222, 2481, 3945, 4131, 1513, 2592, 3357, 1842, 2855, 1762, 3743, 1000, 1539, 3573, 3457, 912, 2251, 661, 501, 553, 871, 1304, 1741, 103, 1753, 1351, 2534, 2377, 1654, 2105, 2352, 2326, 1303, 2617, 1562, 730, 52, 1458, 2515, 1223, 1268, 1454, 1384, 576, 851, 3343, 925, 978, 289, 579, 2863, 345, 2667, 2851, 403, 2307, 994, 1512, 2498, 286, 2668, 2828, 938]. Parallelism [3978, 3222, 4091, 3250, 3200, 4109, 2081, 838, 1877, 2319, 596, 2745]. Parallelism-Optimizing [3222]. parallelizability [1881]. parallelizable [287, 3189]. Parallelization [3670, 4212, 1050, 3031]. Parallelized [3429]. Parallelizing [19, 3344, 1507, 3234, 1795, 227]. Parameter [3811, 1877, 2903, 795, 1168, 2218, 2397, 2708, 2887, 2946]. parameter-driven [1168]. parameters [274, 2300]. Parametric [4030, 1240, 2837]. paraphrases [2741]. PARAS [795]. ParaX [2551]. ParChain [2828]. ParClusterers [4028]. parenthood [557]. Pareto [1442]. PARIS [585]. Parity [3406, 2519]. ParPaRaw [2307]. PARQO [3946]. Parquet [2185]. parse [1952]. parser [1722]. Parsimonious [374]. parsing [2307]. part [2997]. Partial [1596, 2941, 637, 2425, 2358, 1992, 1269]. partial-pairs [1269]. partially [846, 1032, 590, 451]. partially-matched [590]. particle [222]. particle-and-density [222]. partite [2447]. Partition [3803, 3722, 1482, 593, 2449, 2894, 1016, 3032]. partition-based [593, 2894, 1016]. partitional [623]. partitioned [1087, 512, 1123, 993, 2671, 3032]. partitioner [1747, 1347]. Partitioning [4187, 798, 4087, 3966, 3630, 3340, 3429, 3202, 1953, 1565, 1440, 1412, 2107, 1024, 695, 344, 1358, 2353, 2065, 2260, 1497, 1736, 1832, 528, 991, 793, 2106, 1677, 2366, 644, 1721, 966, 1733, 1301, 1665, 53, 1159, 1663, 1242, 388, 1669, 2861, 1211, 2585]. party [1167, 2276]. Pass [4209, 2672, 1270, 1698, 177, 593]. Pass-join [593]. passage [3175]. Passing [4209, 4218]. Past [3934, 509, 3078, 3133, 758, 3137, 2776]. Patching [3941]. Path [1635, 3622, 3761, 3672, 4133, 271, 4174, 3775, 4192, 1064, 2702, 3666, 2829, 2631, 2195, 1403, 1081, 602, 2819, 2780, 1508, 2035, 407, 1868, 2593, 3045, 630, 2306, 2296, 2968, 518, 1633, 606, 1060, 2118, 1219, 2077, 2652, 2859, 3009, 2764, 936, 3842]. Path-Centric [3761, 4192]. pathology [701]. Paths [4204, 3842, 3300, 2001, 1008, 2423, 2571, 2526, 2579, 2132]. patient [2181, 1763]. patients [2802]. Patricia [3683]. PATSQL [2638]. Pattern [3972, 3769, 3407, 3300, 2312, 3445,

628, 3588, 4229, 3255, 427, 359, 2129, 3004, 2411, 3094, 1047, 363, 959, 505, 2858, 444, 151, 290, 598, 1285, 1991, 1256, 243, 633, 244]. **Pattern-Aware** [4229]. **pattern-based** [2411, 151, 1991]. **Pattern-Consistent** [3769]. **Pattern-Oriented** [3407, 3094]. **Patterns** [3325, 4101, 3367, 3744, 231, 1280, 948, 2108, 232, 1833, 1349, 1654, 1630, 2187, 2432, 1935, 10, 160, 2699, 2110, 611, 2061, 931, 1202, 2641, 361, 1068]. **Paxos** [533]. **PaxosStore** [1773]. **Pay** [3531, 93, 191]. **Pay-as-You-Go** [3531, 93]. **Payment** [3557]. **PBE** [3784]. **PBench** [4252]. **PBS** [2519]. **PC** [1453]. **PCBS** [4028]. **PCSP** [3775]. **PD** [3925]. **PD-Explain** [3925]. **PDiffView** [326]. **PDQ** [1143]. **PDW** [1138]. **Peer** [485, 3616, 764, 208, 575, 120, 122, 792]. **peer-based** [120]. **Peer-to-Peer** [3616, 764, 208, 122, 792]. **peer-wise** [575]. **pen** [1426]. **penalties** [2977]. **Penalty** [3946]. **Penalty-Aware** [3946]. **per-key** [2626]. **Per-Query** [3548]. **Per-Record** [3779]. **PERC** [1981]. **percentile** [2768]. **Perception** [3278]. **perfect** [1181]. **PerfGuard** [2796]. **Perform** [3965, 915]. **Performance** [3273, 3275, 3386, 4055, 3547, 3980, 7, 2250, 3375, 681, 4078, 3337, 3212, 3891, 4294, 3323, 3294, 1355, 2078, 3157, 3937, 3639, 4151, 3647, 3678, 4085, 4320, 3151, 4009, 4203, 3836, 3934, 3829, 3667, 3921, 3642, 4196, 3613, 4328, 3920, 3327, 3437, 3493, 4323, 4296, 3255, 2759, 308, 863, 2796, 1476, 2826, 1380, 1876, 2637, 1392, 1590, 1024, 1192, 359, 1255, 469, 3002, 1005, 1523, 1679, 2820, 1566, 2891, 1224, 1634, 382, 2329, 1529, 2267, 140, 2246, 622, 597, 3110, 25, 3060, 821, 2340, 468, 1286, 549, 2852, 2295, 2167, 1191, 1627, 720, 298, 721, 840, 1325, 2589, 240, 229, 2605, 2568, 2918, 3069]. **performance** [1170, 3240, 1203, 1489, 2874, 3182, 2364, 110]. **Performance-Aware** [3921]. **Performance-Based** [3639]. **Performance-optimal** [2078]. **performances** [155, 3073]. **Performant** [3830, 4176, 2981, 2305]. **Performing** [4074]. **performs** [2940]. **PerfXplain** [622]. **Perils** [3528]. **Periodicity** [3194]. **Periscope** [117]. **Periscope/GQ** [117]. **PerMA** [2996]. **PerMA-bench** [2996]. **Permissioned** [3241, 3624, 2142, 3024, 2467, 3005]. **Permutable** [2491]. **Permutation** [1360, 1108]. **Permuting** [839]. **Perseus** [1401]. **persistence** [2493]. **Persistent** [1662, 3598, 1288, 2356, 4075, 2544, 3157, 4282, 3242, 2996, 2451, 2545, 1652, 465, 2532, 2997, 3133, 2304, 2340, 2345, 2852, 1726, 1037, 3028, 2633, 2898, 3182, 2293]. **persistent-main-memory** [1726]. **Personal** [2224, 2320, 342, 1086, 2835, 2007, 2197, 1244]. **Personalized** [4106, 3266, 3713, 550, 3211, 524, 527, 1195, 1094, 2913, 2311, 1597, 1842, 2617, 2264, 1645, 819]. **Perspective** [3716, 3661, 4369, 3939, 3637, 2028, 1434, 2223, 893]. **perspectives** [1188]. **Perturbation** [1621, 71, 238]. **Perturbed** [4094]. **PET** [753]. **Petabyte** [3856, 2122]. **Petabyte-Scale** [3856]. **PetPS** [3242]. **PG** [4296]. **PGE** [2906]. **PGM** [2346]. **PGM-index** [2346]. **PGQ** [4098, 3986, 3502]. **Ph.D.** [1187]. **phase** [2256, 2582, 1345]. **Phi** [1276]. **PHOcus** [3097]. **Phoebe** [2683]. **phones** [325]. **phonetically** [2674]. **photos** [3097, 932]. **PhotoStand** [932]. **phrase** [459, 1247]. **physical** [2480, 4, 3014, 569, 111, 3180, 273]. **physicochemical** [142]. **physics** [2818]. **Picasso** [474, 1788]. **picked** [2330, 2811, 3082]. **PIDS** [2329]. **piece** [182, 3309]. **piece-wise** [182]. **pieces**

[1010]. **Piecewise** [3309, 3328, 561]. **pig** [601, 288]. **Pigeonring** [2044]. **Piggybacking** [813]. **PikePlace** [3520]. **PilotScope** [3617]. **PIM** [3237]. **PIM-Tree** [3237]. **Pinterest** [3224, 4003]. **Pipe** [3848]. **Pipeline** [4340, 3353, 3494, 4167, 3343, 3506, 3248, 4109, 2741, 1766, 2675, 2539, 2688]. **Pipeline-parallel** [3343]. **Pipelines** [3741, 3774, 4161, 4336, 3803, 4201, 3534, 4076, 3156, 3857, 4277, 4002, 2523, 3117, 1851, 2154, 2774, 2268, 3118, 2688, 2807]. **Pipemizer** [3117]. **PipeTGL** [4167]. **PIQL** [587]. **Piranha** [861]. **Pivot** [1717, 3883]. **Pivot-based** [1717]. **PivotE** [2217]. **pixel** [1181]. **pixel-perfect** [1181]. **Pixida** [1458]. **PL** [898]. **PL/SQL** [898]. **place** [1351, 3171]. **Placement** [3222, 3867, 3656, 280, 562, 607, 979, 2238, 1689, 3003, 3026, 1344, 1631, 2998]. **places** [537]. **plain** [2152]. **Plan** [9, 3561, 4160, 2167, 3946, 3149, 3605, 441, 92, 108, 1515, 3096, 2878, 2935, 110, 1919]. **Plan-based** [9]. **Plan-structured** [2167]. **plane** [1741, 1932]. **planet** [715, 289]. **planner** [1277]. **Planning** [4276, 3923, 3646, 3355, 1126, 837, 2593, 3052, 1956, 2333, 935, 2286, 2476]. **PlanRGCN** [4085]. **Plans** [3299, 3776, 3645, 3383, 1965, 92, 1919, 746, 1241, 3014, 512, 252, 559, 3090, 1936, 1702]. **Planting** [2298]. **PLASMA** [924]. **PLASMA-HD** [924]. **plateaus** [1438]. **Platform** [3843, 3505, 3397, 3473, 3908, 3455, 4300, 3246, 3845, 3930, 3434, 1940, 2732, 878, 872, 1970, 1162, 104, 1893, 874, 1654, 746, 3059, 3077, 2700, 1367, 2738, 2725, 997, 635, 744, 1884, 2771, 1057, 876, 918, 887, 2211, 3084, 2717, 2233, 1197]. **Platforms** [3815, 3247, 3479, 4335, 3234, 2966, 2248, 2401, 2065, 2609, 1562, 124, 2792, 506, 2115, 3167]. **Plato** [2342]. **Platoon** [4101]. **Plausible** [1668]. **Play** [4243, 4240, 2641]. **Play2Win** [4348]. **players** [482]. **Playful** [749]. **Playground** [4348, 3872]. **Plex** [4182, 3992, 3173]. **PLIN** [3182]. **PLP** [565]. **Plug** [4243, 4240, 2641]. **Plug-and-Play** [4243, 4240, 2641]. **plugin** [1993]. **plus** [1427]. **Plush** [3028]. **PM** [2898, 2309]. **PM-friendly** [2898]. **PM-LSH** [2309]. **PMem** [2607, 3063]. **PMem-DRAM** [2607]. **PNUTS** [104, 2252]. **POEM** [3094, 3407]. **POIKILO** [906]. **Point** [3650, 3745, 3298, 3231, 3999, 3391, 901, 817, 1109, 528, 3041, 1713, 142, 725]. **point-based** [528]. **point-of-interest** [901, 1713]. **Point-Range** [3391]. **Point-to-Hyperplane** [3231]. **point-to-point** [817, 1109]. **Points** [2845, 3152, 2349, 816, 496]. **Points-of-interest** [2845]. **pointwise** [2382]. **Polar** [4333, 3645]. **PolarDB** [3450]. **PolarDB-SCC** [3450]. **PolarDB's** [4290]. **PolarFS** [1972]. **Polaris** [4333]. **Polarization** [3146]. **policies** [2065, 428]. **Policy** [3726, 4177, 2102, 1474, 2577, 2746]. **policy-aware** [1474, 2746]. **Policy-Based** [3726]. **PolicyReplay** [343]. **Poligras** [3726]. **Pollock** [3306]. **PolyBase** [4018]. **PolyFrame** [2666]. **Polyglot** [3127, 2821, 2754, 2597]. **polygons** [1861]. **polymorphic** [287]. **polynomial** [363]. **polynomials** [1415]. **polystore** [1397]. **Polystores** [3451]. **Ponds** [4330]. **pool** [1283]. **Pooling** [3665]. **popular** [2816]. **Popularity** [2871, 2959]. **populating** [927]. **population** [2337, 2608]. **Portable** [4146, 543, 1627, 938]. **Portals** [3507]. **Portfolio** [4000]. **positioning** [1980]. **positions** [2586]. **positives** [584]. **possibility** [1099]. **Possible** [3267, 1317, 220, 2463, 1360, 1516]. **PostCENN** [2710]. **PostgreSQL**

[928, 3471, 731, 2009, 2710]. potential [120, 3132]. Power [3153, 4098, 225, 3979, 3465, 4120, 4277, 45, 2150, 2801, 100, 1130, 1510]. Power-law [225]. Powered [3984, 4275, 3714, 2545, 767, 1982, 573, 1642, 1061, 2696, 3136]. Powerful [4141, 4253, 3814]. Powering [3960, 2759]. PowerPivot [1129]. PPQ [2500]. PPQ-trajectory [2500]. PQD [3548]. PR [2626]. PR-sketch [2626]. Practical [4017, 4271, 3980, 4032, 3668, 4285, 804, 4163, 1285, 3918, 3826, 4099, 4114, 2448, 50, 1376, 637, 823, 2455, 2673, 287, 1874, 1856, 2409, 2391, 1852, 2563, 2909, 2286, 1773]. practically [2908, 2851]. Practice [3467, 4223, 255, 2481, 2359, 770, 2795, 2722, 2296]. practices [294, 1614]. practitioners [2302]. PRAM [4022]. Pre [3351, 4124, 3676, 2838, 3452, 3696, 3711, 3333, 2487, 2584]. Pre-Trained [3351, 3676, 3696, 3711, 3333, 2487, 2584]. Pre-Training [4124, 3452, 2838]. precise [2586]. Precision [1590, 4337, 182, 2100]. precomputed [2418]. predefined [2885]. predicate [52]. Predicates [3567, 4232, 664, 2117, 2281, 2670, 1546, 2520]. Predict [3540, 1779, 973]. Predictable [4151, 229, 193]. Predicting [4085, 973, 856]. Prediction [4135, 4129, 4216, 3360, 4162, 4088, 4320, 4174, 4027, 4226, 454, 2950, 2587, 2508, 2871, 2988, 2390, 2167, 2495, 3081, 1206, 894, 1244, 936, 2364]. Predictions [3875, 2503]. Predictive [4124, 3454, 3387, 3046, 910, 579, 2745, 723, 270]. PreFair [3284]. Preference [1252, 2632, 3863, 928, 3188, 1114, 477, 1588, 520, 2127, 258, 751, 1213, 1244]. Preference-aware [1252, 928, 477]. preferences [2344, 1334, 85, 1597]. Prefetch [3961, 2427]. prefetcher [2404]. Prefetching [3698, 1835, 700]. Prefix [2908, 155]. Pregel [1096, 1303, 1052, 1203]. Pregel-like [1096, 1303, 1052]. Pregelix [1235]. premises [2727]. Prep [4129]. Preparation [3516, 4224, 4336, 3886, 4129, 2775, 2214, 2584]. prepared [296]. Preprocessing [3608, 2523, 836, 2490]. prescribing [1670]. Presence [4219, 3830, 378, 350, 241]. present [509, 3078, 3133, 3137, 2776]. Preservation [3575, 3910, 4146, 651]. preserved [2605]. Preserving [3402, 4339, 3217, 3963, 3956, 3473, 3352, 4215, 3837, 775, 2071, 2455, 1668, 70, 2182, 2395, 2022, 1174, 2791, 3179, 858, 2355, 1387, 13, 3062, 2412, 3167, 164, 792, 1758, 249]. PRESS [1059]. Pressure [3833]. prestige [373]. prestige-based [373]. Presto [3850]. Pretrained [4013]. prevent [1682]. Preventing [252, 2443, 2994]. prevention [1297]. Price [4102, 1626, 1985, 2857, 955, 619, 1898, 4013]. price-and-time-aware [1985]. price-aware [1898]. Price-optimal [1626]. Pricing [3639, 2378, 3915, 2263, 1810, 1215, 755, 1067]. Primary [4214, 3828, 396]. PRIMAT [2182]. primitive [1560]. primitives [1133]. principle [2044]. Principled [4271, 1054]. Principles [1336]. printing [940]. priorities [1171]. prioritizing [1742]. priority [2954, 2124, 1171]. priority-based [1171]. PriPL [3771]. PriPL-Tree [3771]. PRISM [63, 522, 1387]. PrismX [3928]. PriSTE [2192]. Privacy [3251, 70, 4106, 4094, 4339, 3910, 3996, 3989, 3756, 3784, 3473, 3227, 1316, 3406, 3303, 3779, 13, 651, 4314, 257, 3684, 3771, 2412, 3352, 3939, 4215, 3167, 3837, 164, 1758, 3317, 3361, 775, 2662, 2987, 2455, 1668, 1962, 948, 688, 2023, 2192, 394, 2123, 2646, 2665, 461, 2524, 2182, 1295, 2395, 1367, 2965, 2022, 1874, 804, 2225, 615, 684, 1174, 1031, 1214, 2876, 575, 2718, 2746, 2558, 2870, 1681, 1614, 1925, 2399, 268, 393, 395, 2628, 1084, 2478, 2351, 238, 1798, 2191, 2460, 894, 2513, 524, 685, 686, 792, 249]. Privacy-aware [257]. Privacy-Enhanced [3996]. Privacy-Preserving [4339, 3473, 3352, 4215, 3837, 13, 3167, 1758, 775, 2455, 1668, 2182, 2395, 2022, 792]. privacy-protected [1962]. Private [3213, 3460, 3308, 3634, 3397, 4169, 3262, 3287, 4125, 3208, 3695, 3529, 3571, 3773, 3484, 3549, 3682, 3307, 3903, 3855, 4228, 2064, 2794, 2657, 2023, 2720, 2284, 2634, 1474, 431, 1320, 1583, 2205, 2549, 2943, 1105, 2225, 2529, 2141, 1947, 1174, 550, 3006, 1057, 996, 2622, 2889, 781, 4081]. Private/ [4081]. Privately [3548, 3284, 3779, 3172]. PrivateSQL [2141]. PrivBasis [684]. PrivEval [4314]. Proactive [3665, 2905]. Probabilistic [409, 1770, 3143, 4181, 214, 3405, 669, 4160, 599, 1019, 1725, 3674, 970, 2381, 147, 570, 668, 3099, 982, 984, 613, 1274, 1498, 1981, 28, 212, 397, 398, 980, 1341, 2344, 66, 1728, 1605, 67, 435, 585, 525, 1297, 30, 434, 411, 408, 3190, 639, 936, 1576]. Probabilistically [637]. probability [2009]. probable [29]. probably [2253]. probe [1828, 2789]. Probesim [1836]. Probing [3249, 924, 1828, 62]. Problem [3256, 303, 2678, 2919, 607, 787, 980, 125, 1673]. Problems [3483, 4374, 3974, 3819, 4362, 3848, 3861, 1437, 1311, 199, 2401, 3134, 383, 829, 2280, 879, 1064, 1203]. Procedural [2594]. procedure [1307]. procedure-oriented [1307]. procedures [91]. Procella [2227]. Process [3305, 3367, 119, 3658, 2596, 1042, 2701, 2212]. processes [424, 920, 144]. Processing [4267, 3338, 4144, 3785, 3541, 3656, 4158, 3649, 3354, 3513, 3926, 692, 3984, 3651, 3428, 4260, 3237, 3415, 1463, 3986, 1231, 3961, 3538, 3545, 3758, 4198, 1341, 3495, 3733, 4011, 4190, 3571, 4009, 4203, 3518, 803, 4250, 4368, 3234, 4196, 417, 3485, 3563, 3269, 3390, 3855, 3893, 4297, 4148, 2251, 1940, 308, 653, 891, 865, 1376, 2770, 750, 1462, 1640, 553, 587, 855, 2064, 2455, 2742, 570, 281, 2094, 360, 929, 944, 1157, 859, 365, 389, 784, 540, 1024, 1772, 103, 2848, 727, 797, 1155, 1377, 2113, 2434, 768, 1151, 2275, 509, 2092, 2751, 1781, 2326, 1724, 81, 2768, 3011, 2613, 2012, 1119]. processing [86, 2682, 1975, 1362, 1096, 1303, 2463, 853, 1249, 1389, 3022, 910, 1634, 378, 729, 1564, 1857, 1049, 1628, 140, 1689, 1102, 2035, 1355, 897, 952, 479, 2287, 1327, 3083, 1934, 2627, 48, 728, 1371, 112, 1771, 1312, 2612, 25, 1214, 1083, 1800, 1887, 2106, 3027, 575, 134, 657, 1530, 2080, 3044, 1527, 1425, 1932, 484, 1446, 1899, 925, 246, 2756, 1339, 1100, 299, 1765, 1923, 978, 2268, 2499, 1298, 2466, 1799, 1460, 520, 1471, 741, 1733, 476, 1866, 993, 2737, 449, 1258, 2332, 2053, 1616, 1122, 1804, 2111, 2497, 1242, 2145, 2834, 2564, 3030, 388, 2697, 1669, 890, 2960, 40, 481, 567, 1093]. processing [2484, 2698, 202, 447, 2707, 2668, 2743, 1233, 1272, 49, 2136, 847, 2079, 283, 671, 938, 1776, 3169, 912, 1253, 1576, 463, 3114]. Processing-Guarantee [4009]. Processing-in-Memory [3237, 2287]. Processor [3498, 1255, 3649, 2755, 922, 1236]. Processors [3801, 2388, 400, 2327, 539, 1276, 201, 1950, 912]. Product [4096, 3708, 4241, 3249, 1476, 2906, 982, 2760, 1451, 2482, 2400]. Production [4291, 3156, 4295, 2236, 2805, 2375]. production-friendly [2805]. Production-Grade [4291]. productive [1325]. productivity [3128]. products [1914, 547, 2572, 245, 733]. Professional [3528]. profile [903, 949, 1763, 1779]. profiles [16]. Profiling [4319, 1236, 1696, 7, 706, 120, 1385, 1416]. Profit [3547, 2624]. Program [3404, 3158, 2820, 2335]. Programmable [2315, 2637, 1932]. programmer [3128]. Programming [3162, 4163, 1044, 2986, 2027, 1375, 2485, 709, 812, 3015, 1914, 2588, 1520, 1791, 2697, 3128, 1878, 1238]. programming-based [2485]. programming-by-example [1878]. Programs [3951, 3226, 4176, 1340, 2352, 545, 1867, 1528]. progress [190, 2780, 604, 2771]. Progressive [1092, 2113, 2259, 2693, 3429, 3893, 2179, 1913, 977, 2779, 2289, 1623]. ProgressiveDB [2179]. project [2979]. Projected [3749, 2870, 2107, 2638]. Projection [2884]. Projection-compliant [2884]. projections [2886, 276]. Promotion [4176, 179]. prompt [3192]. prompt-tuning [3192]. PromptEM [3192]. Prompting [4126, 3807]. Prompts [4141]. Pronto [1170]. Proof [4260, 1143, 432, 2327, 1285]. proof-driven [1143]. proof-of-work [2327]. Proofs [3301, 3718, 574]. Propagating [34]. Propagation [3569, 4163, 3245, 4240, 1680, 1270, 2501, 963, 2977]. Properties [3575, 2003]. Property [3873, 3762, 4370, 4364, 3395, 3103]. PROPOLIS [920]. protect [393]. protected [1962, 557, 2994]. protecting [2192, 1084]. protection [2577, 1214, 894, 524]. protein [142].

Proto [3797]. Proto-Actions [3797]. Protocol [4300, 4199, 2372, 406, 1714]. Protocols [3872, 2109, 2477]. prototype [895]. Prototyping [4107]. Provable [3628, 2346]. provably [3008]. ProvCite [2095]. Provenance [1676, 1989, 1388, 2841, 3443, 1999, 601, 326, 2523, 3093, 1042, 1340, 1595, 1997, 456, 2798, 61, 1470, 2328, 3088, 1949, 1787, 2514, 1783, 2112, 2009, 2021, 320, 2095, 1418, 1758, 2521, 783]. Provenance-based [2841, 2095]. provider [1854, 482]. providers [1768]. Providing [1969, 2305, 1328]. provisioned [920]. Provisioning [3665, 2183, 1198, 595]. ProvSQL [2009]. proxies [2405]. Proximity [371, 4100, 3194, 1897, 1629, 428]. Proxy [3419, 3123, 2963]. PRUC [2844]. Pruning [4182, 2110, 564, 2611]. PS [2060, 4228]. PS-MI [4228]. PS-tree-based [2060]. Pseudoarboricity [3748]. PSFQ [3473]. PSynDB [2205]. PT [3891]. PTM [3452]. PTrider [1985]. Pub [3904]. Pub/Sub [3904]. Public [3213, 3460, 3799, 4125, 878, 3166, 789]. publication [2351, 249]. publications [130]. publish [37, 1155, 38, 811, 1501, 1055]. publish-subscribe [811]. publish/subscribe [37, 1155, 38, 1501, 1055]. pubLisher [99]. Publishing [688, 3996, 268, 70, 461, 236]. PUC [2029]. PUC-Rio [2029]. PULs [969]. purchase [652]. Pure [4200]. purely [2336]. Purpose [4173, 3446, 3829, 3903, 1499]. Purpose-Built [3829]. Purview [3440]. push [2913]. pushdown [978, 2650]. Pushing [2281, 617, 1902]. Put [2373]. Putting [601]. PVLDB [1710, 1199, 2663, 1275]. Pyneapple [3924]. Pyneapple-G [3924]. Pyramid

[1749]. **Pytheas** [2411]. **Python** [3925, 1783, 3909, 2215]. **Python-Native** [3925]. **PyTorch** [3457].

Q [2007, 4356, 3104]. **Q&A** [1863]. **QA** [1675]. **Qanaat** [3024]. **QARTA** [2712, 2664]. **QCore** [3747]. **QED** [3814]. **QIRANA** [1810]. **QO** [3474]. **QO-Insight** [3474]. **QOCO** [1395]. **QoS** [1171]. **QOVIS** [4089]. **QPET** [4146]. **QPJVis** [3893]. **QPT** [4328]. **QS** [1176]. **QSkycube** [528]. **QTCS** [3633]. **QTune** [2235]. **Quacking** [4350]. **Quaestor** [1768]. **Qualitative** [1612]. **Quality** [2535, 4316, 3489, 3857, 3893, 4015, 60, 95, 1720, 1370, 219, 131, 505, 1754, 3104, 1967, 2618, 2880, 183, 452, 2464, 1904]. **Quality-Boost** [3893]. **quality-conscious** [219]. **Quantcast** [870]. **quantification** [799]. **Quantifying** [2794, 2349, 209, 3999]. **quantile** [1957, 2942, 2241, 2581]. **quantiles** [1664]. **quantitative** [1477]. **Quantity** [3217, 4146]. **Quantity-of-Interest** [3217]. **Quantity-of-Interest-Preservation** [4146]. **Quantization** [4241, 3231, 1476, 2482, 2500]. **Quantized** [3747]. **Quantum** [3342, 3491, 4092, 3815, 4356, 3581, 1506]. **Quantum-Augmented** [4356]. **Quantum-Inspired** [3581]. **Quasi** [3226, 2528]. **quasi-cliques** [2528]. **Quasi-Stable** [3226]. **QueRIE** [494]. **Queries** [3924, 4261, 3535, 683, 3342, 3892, 3788, 3769, 4334, 3235, 4255, 4348, 4231, 3267, 3462, 4173, 3466, 4254, 4230, 3469, 3675, 3984, 4359, 4201, 4079, 4064, 4070, 3471, 3558, 4023, 3672, 3348, 3630, 4053, 3529, 3863, 3385, 4251, 3779, 4121, 4232, 4295, 3755, 3490, 3775, 3307, 4344, 3738, 3488, 3371, 3916, 3644, 3917, 4147, 1999, 740, 454, 664, 1886, 3051, 2073, 2892, 929, 47, 1500, 387, 389, 1112, 195, 668, 1596, 190, 2829, 1006, 2631, 2934, 3057, 1490, 1945, 1750, 2632, 1427, 2123, 1854, 2886, 31, 1340, 1676, 2714, 1403, 343, 681, 836, 2524, 1443, 1467, 2704, 1957, 1284, 2038, 857, 81, 2049]. **queries** [616, 2473, 2821, 1837, 194, 826, 2116, 1004, 20, 1382, 2814, 2798, 356, 2334, 138, 61, 1889, 2416, 1995, 27, 1874, 2236, 1761, 2301, 2670, 837, 1533, 1466, 5, 2037, 1431, 3048, 991, 1463, 1152, 1312, 702, 1031, 1231, 1651, 1067, 2420, 2690, 2689, 2197, 1879, 2347, 1925, 2399, 2491, 2164, 1588, 1033, 785, 1819, 1899, 1019, 1045, 90, 384, 1022, 3181, 3085, 1744, 1592, 393, 1029, 1000, 1341, 2321, 648, 2344, 376, 832, 345, 2178, 586, 518, 520, 2016, 993, 939, 2597, 2459, 2745, 1655, 150, 449, 909, 109, 896, 1791, 1221, 2638, 65, 1745, 1996, 700, 2896, 803]. **queries** [2376, 258, 227, 372, 1621, 2291, 1633, 2006, 1892, 2947, 2674, 751, 87, 417, 606, 981, 825, 1372, 1148, 2622, 1170, 1486, 2513, 3123, 2963, 49, 685, 847, 2889, 633, 2476, 270, 2859, 3009, 2364, 463, 554, 254]. **Query** [4261, 987, 3432, 3474, 1526, 4267, 3503, 3386, 3338, 3286, 784, 1738, 1423, 3313, 3299, 3336, 4166, 4096, 4307, 1374, 4086, 3404, 3354, 3925, 1766, 3843, 3776, 3394, 3513, 3891, 3622, 3533, 4324, 3228, 314, 3022, 4365, 3997, 1452, 3496, 4021, 4102, 3651, 4208, 4330, 2902, 4285, 3986, 3661, 4372, 1448, 3511, 3551, 3301, 3969, 3942, 3906, 3820, 3545, 3633, 542, 4162, 4356, 4030, 4085, 4320, 3215, 3562, 3280, 299, 1840, 3244, 844, 3548, 3495, 3443, 3227, 4273, 3370, 3363, 4190, 3850, 3211, 3475, 4189, 3999, 3752, 3571, 4111, 4288, 3429, 3518, 3964, 1865, 3484, 3480, 3890, 3771, 3814, 3949, 4122, 4153, 4368, 3234, 3613, 3417]. **Query** [2055, 3946, 4328, 3840, 2743,

**3254, 4016, 4089, 3149, 3493, 3390, 3899, 3893, 3868, 4323, 3605, 2364, 3521, 3612, 3276, 4139, 1785, 749, 2759, 750, 1176, 2924, 2056, 2694, 1462, 1440, 1412, 1640, 35, 587, 855, 3047, 799, 823, 752, 675, 8, 2064, 2455, 1143, 1395, 570, 1534, 645, 2109, 1140, 1846, 944, 859, 1392, 1789, 341, 540, 1024, 1255, 93, 253, 2263, 797, 1569, 1586, 835, 2113, 2226, 2434, 1810, 827, 424, 2027, 108, 197, 2243, 1151, 2275, 2133, 928, 2326, 1724, 2176, 46, 746, 3120, 1768, 3011, 1751, 1241, 2818, 1032, 1119, 2567, 143, 86, 1277, 19, 474, 2463].
query [1249, 1389, 910, 2798, 442, 3014, 2501, 378, 1851, 1179, 58, 1405, 2549, 930, 1328, 1628, 2329, 2990, 1689, 1102, 2035, 1355, 897, 479, 5, 1327, 1077, 1199, 1934, 747, 2141, 112, 2288, 1469, 2612, 615, 841, 1214, 1800, 2235, 2190, 3088, 575, 1536, 1672, 416, 2080, 1527, 946, 419, 2165, 2167, 2391, 515, 2200, 2879, 1354, 353, 189, 1339, 1100, 922, 1026, 559, 2782, 90, 978, 14, 2499, 2878, 472, 1298, 75, 2466, 1638, 1460, 1471, 1481, 932, 1971, 180, 617, 1579, 435, 84, 1113, 643, 2666, 2964, 1804, 2111, 2497, 725, 3090, 2145, 3172, 879, 1240, 1506, 1507, 2019, 3030]. query [388, 2697, 2837, 1150, 890, 385, 2020, 40, 1014, 1093, 2698, 2036, 1936, 738, 856, 1206, 71, 810, 765, 753, 796, 1499, 3102, 546, 1272, 1587, 2998, 3073, 2118, 2641, 283, 938, 970, 1070, 370, 588, 2935, 174, 1576, 2134, 2810, 1702, 1472, 244, 3114, 1462, 195]. Query-able [1766]. Query-aware [1452, 2235]. query-based [2666]. query-by-humming [747]. Query-Centered [3633]. query-centric [1499]. query-dependent [86, 90]. Query-Driven [3999, 987, 1840, 2743, 2694, 3120, 617]. Query-Level [4166]. Query-Oriented [4111, 1423]. query-rewriting [2924]. Query-Scaled [4096]. Query-Sensitive [3215]. Query-Specific [3518]. query-update [645]. query-workload-aware [1412]. QueryArtisan [4312, 3973]. QueryBooster [3503, 3386]. QueryFormer [2935]. Querying [625, 1280, 3424, 3621, 167, 153, 3515, 3928, 4022, 3938, 3465, 144, 434, 2132, 4065, 3881, 3914, 3686, 3329, 1871, 491, 1103, 1343, 1684, 220, 1589, 1792, 2523, 333, 682, 1897, 1594, 1581, 1801, 817, 2004, 1109, 812, 821, 3045, 3130, 73, 362, 523, 655, 516, 1553, 1971, 918, 1519, 2459, 1991, 2518, 2767, 115, 117, 1626, 2005, 1906, 2500, 1108, 2674, 85, 1418, 1591, 1499, 1051, 184, 2645, 2297]. QueryMarket [755]. QueryScope [138]. quest [3120, 900, 1151]. Question [4224, 808, 3692, 1937, 3838, 1586, 1675, 2709, 2590, 3105]. Question-Aware [4224]. Questionnaire [3473]. questions [1284, 535, 328, 590]. QuestPro [1999]. queueing [2656]. queueing-theoretic [2656]. QuEval [971]. quick [2638, 488]. QuickFOIL [1238]. quickly [1094]. Quickstep [1884]. Quill [1620]. QUIS [1792]. Quorion [4307]. quorums [637]. QuoteInspector [3932]. quotient [828].**

R [410, 921, 3399, 3969, 1560, 1881, 449, 1236]. R&D [3934]. R-based [921]. R-trees [449, 1881]. R2 [936]. R2-D2 [936]. R3 [1142]. RACE [851]. raced [94]. radix [1351, 1301]. RadlER [4326]. Rafiki [2051]. RAG [3884, 4350, 3927]. RAGraph [3563]. Railgun [2765]. Raising [3690]. RALF [3585]. RAM [1545]. RAMP [2761]. RAMP-TAO [2761]. Random [3289, 4104, 3381, 3678, 2452, 2062, 2657, 1649, 609, 1706, 2932, 2527, 80, 3191, 2642, 2589, 839, 1629, 238, 1036, 974, 2948].

random-access [839]. randomization [394]. Randomized [4075, 3376, 177, 2565, 232, 1468]. Range [3687, 4255, 3209, 3802, 4049, 4125, 3739, 4206, 3529, 4232, 3771, 3391, 3254, 3387, 3365, 976, 1876, 2109, 1789, 663, 2123, 2117, 2997, 747, 2304, 1447, 1031, 1214, 1136, 1339, 376, 3038, 2933, 227, 385, 1892, 2513, 2889]. Range-Filtered [4125]. Range-Filtering [4206]. range-query [2109]. Ranges [3955, 192]. Rank [1324, 2456, 4030, 1045, 965, 3276, 2462, 371, 1354, 685]. Ranked [2886, 311, 3054, 38, 590, 414, 2376]. RankIE [311]. Ranking [4054, 3345, 3267, 3842, 690, 397, 4053, 1593, 333, 1750, 798, 1250, 2533, 212, 1592, 1316, 2867, 2127, 2691, 537, 564, 2257]. rankings [2059]. RankPQO [4030]. ranks [1070]. Rapid [1265, 3158, 1734, 1855]. Rapidash [3694]. RapidFlow [2992]. rapidly [1449, 1929]. RapidMatch [2497]. RapidStore [4230]. Raptor [2213]. Rare [1234]. Rashnu [3719]. RASP [1176]. RASP-QS [1176]. Raster [4011, 3485, 2213]. rasterization [1861]. rate [2505]. rates [362, 2977]. RateupDBTM [2760]. rating [1061]. ratings [761]. Ratio [826]. rationing [191]. Raw [3685, 750, 2206, 2155, 1980, 1721, 1952, 1790, 2307, 1102]. Ray [3653]. Raytracing [3537]. RC [1892]. RC-index [1892]. RCRank [4053]. RCSI [961]. RDBMS [1541, 1549, 2208, 2101, 538, 599, 1933, 544]. RDBMSs [2885, 4342]. RDF [362, 3487, 1390, 1831, 1075, 1548, 1392, 1423, 2207, 1594, 1581, 1277, 1382, 1850, 1995, 1327, 991, 1116, 54, 362, 1799, 1519, 154, 1491, 822, 801, 1522]. RDF-3X [54]. RDMA [1954, 3164, 2160]. RDMA-enabled [3164]. RDPro [4011]. Re [3311, 3494, 3150, 4018, 2226, 2170, 1183, 12, 2939]. Re-Assignment [4018]. re-evaluating [1183]. re-evaluation [2939]. Re-Execution [3311]. re-identification [12]. Re-Implementing [3494]. Re-Indexing [3150]. re-optimization [2226, 2170]. reach [680, 2577]. Reachability [1108, 3738, 2631, 2934, 681, 560, 998, 2321, 993, 643, 364]. ReAct [3692]. ReAcTable [3692]. reactive [1859]. Read [3802, 42, 435, 4176, 2954, 956, 1718, 577, 2589, 2575, 2653]. Read-once [435]. Read-optimized [42, 956, 577]. Read-Write-Optimized [3802]. Reading [3689]. Reads [4175, 4145, 3450, 1706]. Ready [3793, 3740, 4046, 1481, 2615, 3037]. Real [654, 2129, 3433, 3818, 2665, 3640, 3281, 3505, 3669, 1125, 3199, 3870, 4272, 1430, 1371, 1313, 4312, 4138, 1974, 3444, 4282, 2494, 1695, 3445, 3852, 3595, 4297, 3438, 4252, 2574, 620, 1380, 1789, 2232, 2695, 1610, 1569, 313, 1810, 1369, 2012, 2532, 1115, 1220, 3177, 383, 1574, 2578, 301, 1406, 2850, 464, 176, 1841, 2618, 1968, 1559, 1156, 1568, 337, 1540, 1740, 2583, 1599, 481, 1142, 1164, 1217, 2539, 1861, 2230, 1194, 2611, 3505]. Real-Time [3433, 3818, 3669, 3199, 3870, 4312, 4138, 3444, 4282, 3445, 4297, 3438, 2129, 1125, 1371, 1313, 1974, 2494, 1695, 620, 1789, 2232, 2695, 1569, 1369, 2012, 1115, 1220, 2578, 301, 1406, 176, 1841, 1968, 1559, 1156, 1568, 1540, 1740, 1599, 481, 1142, 1164, 2539, 1861, 2230, 1194, 2611]. Real-World [3640, 3505, 3852, 3595, 2665, 2574, 313, 3177, 383, 1574, 2850, 2583, 1217]. RealGraph [2725]. realistic [236]. reality [1924, 328, 1784]. Realization [1192]. Really

[4372, 4295, 3933, 157, 1469]. Realtime [2264, 2332, 947, 3077]. Rearchitecting [2849]. rearview [157]. Reasoning [3153, 3497, 3945, 204, 3813, 76, 3370, 3728, 4142, 1907, 2133]. reasons [2535]. Rebalance [3557]. Rebirth [4199]. Rebirth-Retire [4199]. rebuild [1774]. RECA [3265]. ReCache [1859]. Recall [4337, 208, 2773]. recall-based [208]. RecDB [905]. Receipt [2515]. RecForUS [4313]. ReCG [3809]. reclamation [1044]. Recognition [3781, 4335, 3255, 2957, 1822]. Recognizing [361]. Recommendation [4204, 4284, 3224, 4227, 4044, 3854, 3947, 3403, 4240, 2816, 233, 3076, 1391, 1195, 1125, 1713, 1863, 2510, 1588, 2435, 905, 125, 1142, 647, 1171, 3053]. Recommendations [3884, 4019, 494, 1718, 2862, 1200, 550, 1559, 1450]. Recommender [4313, 4332, 4150, 4268, 908, 652]. recommenders [1295]. recommending [1807, 279]. recompiling [2491]. reconciliation [2519, 1034, 121]. Reconciling [1750, 904]. reconfigurable [476]. reconfiguration [3183]. reconstruction [1946, 1930]. Record [3238, 377, 3376, 3399, 3779, 3549, 204, 1062, 379]. Record-Replay-Retroaction [3399]. records [1103, 1043, 2693, 766, 1561]. Recovering [558]. Recovery [3574, 2365, 2237, 1263, 626, 707, 2506, 2936, 549, 275, 2040, 211, 1258, 2438, 725, 849, 3182]. recreation [1336]. recreation/storage [1336]. recurrent [2546]. recurring [1152, 1282]. Recursive [3776, 3051, 2101, 2890, 679, 1353]. RED [3971]. Redefined [4060]. redesign [1496, 1714]. Redoop [1152]. Redshift [3821, 2772, 2435]. reduce [802, 1097, 323, 288]. Reducing [3767, 3654, 1121, 842, 2094, 406, 1246, 381, 753, 1494]. Reduction [3725, 3992, 92, 2439, 2053, 1495]. Reduction-and-Bound [3992]. Redundancy [4213, 3108, 391, 2053, 3766]. redundant [96]. Redy [2865]. REEF [937]. reenactment [1787]. Refactoring [3658]. refactorization [2106]. Reference [4006, 4184, 187, 1320]. Reference-Based [4184, 187]. references [1260]. Referencing [3632]. refinable [1523]. refine [2515]. Refinement [3511, 3551, 392, 1577]. Refinements [3892]. Refiner [2696]. Refines [4334]. Reflections [3139]. Reformulation [1392]. Reformulation-based [1392]. Regain [3875]. REGAL [1996]. regenerator [1994]. Regex [3377]. Region [4095, 3563, 3092, 1598, 89]. Region-Aware [3563]. region-based [89]. regional [1833]. Regions [4119, 1065, 2144, 1564, 785, 1744, 141, 2844]. Register [3781]. registration [23, 132]. Regression [3891, 3613, 2421, 3096, 1604, 686]. regressions [2796, 2267]. Regret [4144, 439, 1291, 1035, 1443, 2280, 2019]. regret-bounded [2019]. Regret-minimizing [439, 2280]. Regular [3622, 3672, 2829, 2949, 1488, 353]. regulating [1781]. Reimagining [3936, 3702]. Reinforcement [4117, 3241, 3871, 3378, 3517, 3464, 3970, 2989, 1887, 2235, 2019, 2428, 2799, 2688]. Related [3685, 4134, 3265, 2595, 1719, 1311, 199, 1337]. relatedness [1801]. Relation [605, 2337, 1916, 2077]. Relational [105, 3532, 3607, 3640, 2403, 602, 3466, 4265, 3997, 4029, 3562, 3229, 4134, 3439, 3837, 3438, 2072, 1092, 799, 352, 675, 900, 1900, 1500, 261, 784, 341, 2361, 1005, 1025, 260, 591, 2981, 2398, 3080, 1723, 2386, 1172, 2210, 1537, 2943, 2792, 1227, 1993, 1504, 353, 1283, 2153, 2474, 1608, 1867, 807, 1553, 905, 1567, 2676, 2584, 1760, 2453, 2400, 2698, 1936, 1428, 1878, 2539, 223, 3066, 2591, 1624, 2978, 463]. Relationalize [3423]. Relations [3777, 3606, 2088, 2422, 3130, 760, 183, 585, 2315, 1705]. Relationship [4357, 2845]. Relationships [3198, 460, 592, 706, 458, 1273, 1158]. Relative [594, 2241, 221, 1107]. relative-error [2241]. Relaxation [56, 71]. relaxations [2868]. Relaxed [4116, 1835, 405]. Release [3634, 2023]. relevance [1011]. Relevant [3879, 3876, 699, 373, 743, 198, 10, 76, 888]. reliability [2104]. Reliable [3154, 4166, 1309, 3723, 4009, 3023, 1366, 1408, 484, 1193, 1890, 2696]. RELIC [2730]. reloaded [282]. ReMac [3108]. REmatch [3377]. Remember [1629]. remote [2865]. removal [2565]. Rendering [4266]. renewed [470]. Reordering [3987, 2054, 2076]. Repair [4133, 3740, 1905, 1419, 3084, 536]. repaired [1938]. Repairing [1488, 1091, 2949, 829, 1716]. Repairs [4001, 220, 357, 2410, 1728]. repartition [2122]. repeatable [138]. repeats [851]. Repetition [3154]. Repetitive [3809]. Replace [3205]. Replacement [4177, 3763, 3418, 418, 2277]. Replacements [4302]. Replay [3885, 3399, 2907, 1829, 302]. replay-based [1829]. Replicated [4078, 3825, 3578, 4018, 2883, 2071, 1115, 48, 834, 2168, 1363, 2658, 2290]. Replication [4175, 4151, 1087, 344, 1497, 340, 2910, 1762, 2137, 2541, 2183, 2358, 484, 259, 1829, 44, 2605, 2976, 2448]. reported [1156]. reporting [343]. Repositories [3460, 3879, 946, 30, 2500]. repository [316]. Representation [4334, 3295, 3253, 3322, 3659, 3572, 4001, 3388, 3714, 4156, 3605, 3971, 3126, 1424, 2507, 3119, 2154, 2510, 2402, 2169, 516, 2739, 3020, 2935]. Representations [3466, 3178, 153, 1943, 2809, 2299, 2983, 2547]. Representative [4034, 439, 2280, 497, 2061]. representatives [1694]. Represented [4074]. Representing [3300]. Reproducibility [3862, 3406]. Reproducible [3862, 1413]. Reproducing [3770, 1417]. Repulsers [3146]. repulsive [586]. ReqFlex [896]. request [82]. request-routing [82]. requests [243]. requirements [2765]. reranking [1526]. Resampling [3744]. RESCU [3515]. RESCU-SQL [3515]. Research [4366, 3862, 4374, 3525, 3467, 4107, 2471, 2475, 1437, 3141, 1413, 882, 340, 2225, 2795, 3139, 2255, 1188]. researchers [3140]. Reservoir [4115]. Reshape [3522]. resident [242]. Resilience [3741, 1467]. resiliency [1670, 2305]. resilient [1972, 2325, 1923]. ResilientDB [2325]. Resistance [3645]. Resistant [3237, 3837, 2521]. Resisting [12, 1648]. ResLake [3839]. Resolution [3638, 3773, 3565, 3333, 3500, 3988, 1092, 987, 1462, 1805, 1943, 1484, 1183, 770, 1981, 310, 383, 2089, 1739, 358, 1509, 1988, 2174, 125, 1550, 2923, 3100, 3106, 1098, 1275, 696, 457, 808]. Resolving [3553, 4051, 331, 2016, 320]. Resource [3532, 3847, 4102, 3536, 1223, 3453, 3564, 3665, 3854, 3565, 3826, 3710, 3839, 163, 2269, 702, 1880, 3044, 2495, 1512, 3192, 1890, 1127, 2375]. resource-aware [1890]. Resource-Constrained [3564, 3710]. resources [1709, 949, 1689, 1661, 1193, 452]. respecting [461]. respiration [1763].

respiration-induced [1763]. response [343]. responsibility [1467, 515]. Responsible [4180, 3911, 2472]. Responsive [4033]. restart [609, 1036]. restaurant [1588]. ReStore [621]. Restricted [3672]. restrictions [625, 137, 518]. Result [4324, 4242, 827, 780, 46, 196, 174]. Results [4319, 3769, 3484, 326, 551, 906, 621, 3059, 658, 841, 3088, 490, 542, 3104, 358, 14, 100, 666, 1387, 1579, 2674]. Resumable [1774]. Resurgence [3655]. retainable [937]. retargetable [2666]. RetClean [3912]. retention [137]. rethink [139]. Rethinking [3693, 1323, 2160]. Retire [4199]. Retrieval [3213, 3460, 4207, 3968, 4066, 3912, 3346, 3876, 3890, 440, 901, 311, 743, 1391, 3054, 198, 450, 1250, 594, 159, 2322, 122, 1058, 3175, 704]. Retrieval-Augmented [4207, 3968, 3890]. Retrieval-Based [3912]. Retrieving [373, 1065, 1744, 2753]. Retroaction [3399]. Retrofitting [2881]. retrospective [2730]. Return [2292, 3736, 711, 1988]. Reusable [3769, 2741]. Reuse [4208, 2082, 2820, 1724, 1944, 2202, 2188]. reusing [621]. Reveal [4303, 2767]. Revealing [3402, 2109, 2217]. Revenue [1732, 2263, 1271, 1200]. revenue-maximizing [1271]. Reverse [3590, 1745, 1272, 1036, 1070, 570, 1692, 265, 1490, 1284, 1592, 1000, 1996, 372, 264, 87]. reviewer [1383]. reviewing [1609]. revising [64]. revision [2187]. Revisited [3194, 3393, 1009, 443, 285, 211]. Revisiting [3338, 4041, 1724, 853, 1704, 4066, 2633, 4100]. revival [148]. Reviving [492]. reweighted [2311]. REWIND [1263]. rewired [1516].

Rewrite [3969, 4288, 3521, 2810, 4307]. Rewriting [3503, 3386, 3040, 91, 2152, 4285, 3370, 4190, 2924, 35, 195, 522, 348, 2798, 970]. REX [592, 679]. RFID [540]. RGS [4058]. RGS-Sketch [4058]. RHEEM [1940]. Rich [3286, 1620, 3122, 2981, 176, 2547, 3168]. Ride [3256, 132]. rider [1289]. Ridesharing [3152, 1985, 1220, 1898, 2120]. Right [3420, 2253]. ring [883]. Ringtail [934]. RINSE [1398]. Rio [2029]. RISC [3258, 54]. RISC-style [54]. rise [2755, 2804]. Risk [4000, 3347, 410, 341]. Risks [3251]. RkNN [450]. RL [4086, 3819]. Road [4211, 3669, 3761, 3625, 4117, 4023, 3348, 3355, 3775, 3950, 3194, 3393, 3664, 1493, 910, 1220, 2419, 1735, 2423, 2338, 2578, 301, 756, 1879, 3052, 2306, 472, 2968, 518, 1059, 257, 1633, 2132, 606, 3125, 2859]. RoadTrack [472]. Roar [3497]. RoarGraph [3749]. Robust [3273, 3785, 2866, 3299, 3745, 3601, 3805, 4311, 2463, 4160, 290, 702, 3697, 3280, 4251, 4025, 2674, 1289, 3946, 4328, 3840, 3851, 2620, 2759, 688, 2906, 92, 2877, 1151, 614, 2931, 2980, 2035, 604, 3067, 600, 1852, 2139, 2215, 1512, 2380, 2975, 1746, 1702]. robustified [3039]. Robustness [2653, 3234, 1936, 4235]. Rock [3900]. RocksDB [4046]. Rodeo [3892]. Rogas [1601]. role [70, 216]. RONIN [2747]. Root [4053, 2347, 2211]. Rose [44]. ROSeAnn [904]. Round [4197]. rounds [2481]. Route [4204, 3355, 3194, 667, 350, 1735, 2510, 3052, 299, 1956, 1142, 2333, 2286, 2476, 2764]. routines [729]. Routing [4211, 3761, 4132, 2374, 82, 125]. Row [52, 3856, 4018, 3346, 3255, 1565]. row-column [1565]. Row-Level

[3856, 4018]. Row-wise [52]. ROXXI [492]. RPT [2584]. RTED [600]. RTIndeX [3537]. RTScan [3653]. RuDiK [1987]. Rudolf [1577]. Rule [3196, 4285, 3969, 3509, 3988, 883, 2000, 1168, 392, 584, 1577, 1987, 2863]. Rule-Based [3196, 3969, 3988, 2863]. Rules [3900, 3382, 3663, 3677, 3508, 3364, 4174, 1480, 907, 95, 204, 355, 1349, 2921, 709, 160, 1849, 2215, 1139, 457]. RUMA [1516]. Rumble [2522]. rumour [2115]. Run [3527, 386]. runner [1964]. Running [4307, 4137, 4269, 4321, 387]. Runtime [1753, 3431, 381, 4323, 729, 973, 2597, 2021, 3183]. runtimes [3022, 1100]. RUSH [3818]. RW [2789].

s [961, 1163, 1427, 1446, 4239]. S-Store [1163, 1446]. S2RDF [1519]. S3 [2240]. SA [3104, 2973]. SA-LSM [2973]. SA-Q [3104]. SAASFEE [1393]. Safe [3830, 69, 354, 1862, 2846]. safer [2569]. SagaLLM [4276]. Sage [2377, 3147]. SageDB [3160]. Saibot [3397]. SAIL [4351]. salient [699]. same [394]. Sample [3693, 3533, 3599, 3033, 2291]. Sample-Based [3693]. Sample-Efficient [3599, 3033]. Samplers [4150]. samples [20, 2302, 80]. Sampling [3154, 357, 3708, 3636, 3671, 3783, 4115, 4149, 4326, 3544, 1748, 231, 8, 2161, 224, 1179, 1265, 1929, 1739, 1910, 1279, 983, 989, 1459, 1137, 2608, 1637, 2948, 1310]. Sampling-Based [3783]. Samza [1765]. Sancus [2956]. SAND [2748, 2621]. Santoku [1386]. SAP [3831, 1775, 3058, 897, 2225, 1762, 290, 1767, 2229, 887]. SAPPER [445]. Sapphire [1581]. Sapprox [1637]. SAQE [2455]. SaS [2602]. Satellite [3101]. Satisfaction [3511, 3551]. satisfiability [2134]. Satisfy [4334]. Satisfying [3188]. Sato [2394]. saturation [2400]. Saturn [3597].

Saving [4169, 3808, 1193]. say [1949]. Scabbard [2834]. scalability [1844, 1902, 210, 226, 1355, 1111, 1095, 2290]. scalability-accuracy [1902]. Scalable [3924, 3953, 78, 3273, 2365, 2941, 3282, 624, 297, 4187, 2272, 1500, 3598, 3143, 4221, 977, 1896, 4032, 3218, 967, 950, 2877, 1247, 1040, 4091, 46, 3887, 2528, 3966, 4124, 1027, 4191, 4227, 4333, 2537, 3270, 1845, 5, 1305, 1646, 3157, 2039, 4291, 3739, 4184, 38, 402, 349, 3582, 3587, 3452, 978, 237, 1711, 1829, 3370, 4011, 2667, 2518, 1078, 1906, 411, 4361, 3254, 3832, 3388, 3714, 4028, 3372, 4128, 174, 4286, 3434, 2018, 2759, 50, 1903, 891, 737, 1946, 1210, 3024, 1299, 352, 2462, 872, 1393, 193, 2234, 2731, 663, 1292, 206, 543, 1810, 1369, 1115, 1421, 2993, 910, 2249, 730, 1049]. scalable [998, 401, 1747, 444, 1020, 1885, 1207, 2298, 1570, 1321, 2831, 2655, 2932, 3027, 3055, 1836, 1201, 2345, 1641, 122, 1030, 1932, 2025, 851, 1347, 2358, 631, 1765, 2436, 1378, 2408, 1608, 533, 3038, 2686, 2184, 1968, 2962, 646, 2034, 2803, 1133, 1599, 656, 2020, 961, 2005, 1653, 2909, 364, 1238, 2240, 1253, 3032]. scalably [475]. ScalaGiST [1201]. Scalar [3326, 2178, 2909]. ScalarDB [3451]. Scale [3460, 3972, 4042, 4306, 3623, 3923, 4087, 3224, 3625, 4124, 3842, 4135, 3736, 3453, 3659, 3381, 3743, 3452, 3856, 4003, 3447, 4035, 4283, 4282, 3445, 3934, 3728, 3717, 3556, 3826, 3845, 3840, 4290, 4059, 3742, 3604, 3855, 3652, 3673, 4139, 1871, 2251, 2072, 865, 1376, 1607, 871, 329, 1573, 1814, 2595, 1050, 1965, 1770, 1366, 859, 1135, 2244, 37, 1620, 1927, 1377, 531, 1261, 2872, 1532, 1654, 2800, 2140, 2824, 1751, 2065, 1369, 2325, 2819, 3119, 1220, 2238, 1562, 1109, 1894, 1761, 2442, 2294, 1401, 2749, 1454, 2190, 2669, 2903, 301, 1558, 2242, 1245, 2360, 830, 369, 2470, 1726, 3008, 2321, 2956, 973, 2122, 2753]. scale [1451, 530, 3665, 2773, 178, 1381, 1812, 1971, 1967, 1803, 992, 1444, 2332, 1322, 1128, 1639, 2213, 2052, 1165, 1139, 2130, 1028, 2265, 2124, 2400, 3175, 135, 102, 3069, 733, 2721, 1690, 1890, 822, 1145, 1746, 1824, 1685, 801, 1127, 2654, 786, 2901, 2611, 2928, 1551, 484]. scale-free [1109]. Scale-Out [3934, 4290, 1751, 1369]. Scale-Up [3736, 3934, 4290]. ScaleCache [4291]. Scaled [4096]. scales [868]. Scaling [1380, 2092, 1250, 3525, 4195, 3292, 3405, 991, 3630, 1232, 1344, 807, 3363, 1318, 2658, 2486, 3952, 3457, 2094, 2105, 2868, 805, 2143, 1762, 2137, 2830, 2916, 544, 1884, 472, 2905, 1959, 2666, 2668, 1624, 3166, 933]. Scaling-up [2092, 1884]. Scan [3653, 1476, 1741, 51, 202, 1322, 202]. scans [79, 1756, 1344, 723, 2336]. SCAR [3039]. SCARA [3055]. Scattered [4078]. SCC [3450]. scenarios [105]. scene [3074]. scene-oriented [3074]. SChain [2731]. scheduled [819]. Schedules [3342]. Scheduling [79, 3746, 4021, 4102, 4184, 150, 3585, 3839, 163, 561, 835, 2601, 2609, 1735, 2063, 1631, 1883, 1127]. Schema [814, 4270, 3155, 175, 3491, 3360, 4008, 4164, 1478, 1608, 1365, 4134, 4293, 1300, 3809, 4235, 105, 347, 255, 2082, 3103, 63, 522, 2193, 456, 262, 3174, 2984, 2850, 73, 185, 583, 866, 617, 2363, 1550, 585, 842, 1702, 254]. Schema-agnostic [1478, 1365]. schema-aware [1550]. Schema-based [175, 1478]. Schema-Related [4134]. Schemaless [4003, 1051, 2967]. Schemas [4317, 1054, 625, 64, 1404, 313, 489, 1665, 2698]. Schemata [3807]. Scheme [4185, 4005, 3369, 3712, 817, 2831, 1116, 2788, 1660]. schemes [2109, 155]. Schism [344]. school [730]. SciDB [300]. Science [3282, 3522, 3984, 4333, 4184, 4011, 2523, 3093, 300, 2700, 1606, 2032, 2204, 2254, 3118, 1959]. science-oriented [300]. ScienceBenchmark [3595]. Scientific [3217, 2465, 1393, 1088, 916, 5, 293, 1731, 919, 850, 2021, 1104]. scientist [2208]. Scolopax [919]. SCompression [4103]. SCOPE [103, 2122]. scoped [2964]. Scores [4313]. scoring [2468]. Scorpion [825]. Scotch [2505]. SCOUT [700]. SCQL [3843]. Scribe [4272]. scripts [1783]. Scrutinizer [2442]. Scuba [867]. SDB [1389]. SDEcho [4024]. SDG [4338]. SDG-KG [4338]. SDPipe [3343]. sDTW [699]. Seaform [486]. Seagull [2495]. Seal [641]. Seamlessly [3647]. Search [3426, 3282, 3789, 3203, 3902, 3252, 3359, 3596, 3749, 3330, 4366, 4042, 4026, 3209, 4339, 3737, 3799, 3992, 4225, 4083, 4087, 4183, 4118, 4236, 4075, 3709, 4191, 3397, 4246, 3401, 4006, 3906, 4049, 3680, 3633, 4133, 3381, 4071, 4039, 4257, 3318, 4206, 3346, 4111, 3331, 4298, 3711, 3921, 3950, 4140, 3712, 4239, 4047, 3204, 3757, 4100, 4012, 3899, 3249, 3315, 4287, 3320, 2381, 1737, 3101, 2413, 1299, 1476, 1902, 239, 352, 118, 8, 900, 29, 1913, 3, 667, 551, 1692, 2729, 1927, 2186, 1404, 136, 128, 1222, 97, 2643, 982, 2050, 2292, 2779, 2961, 1011, 591, 641, 1555, 1687, 2324, 1598, 56, 2075, 609, 404]. search [2562, 2369, 1046, 1691, 334, 1922, 114, 968, 1475, 1452, 1707, 1788, 3098, 2386, 2984, 2902, 1315, 350, 571, 794, 2042, 2367, 2419, 129, 1186, 1264, 2289, 2648, 2655, 2039, 76, 196, 490, 1066, 1106, 1201, 1993, 2366, 2825, 756, 2360, 1739, 2389, 1360, 185, 1895, 2912, 14, 393, 395, 535, 488, 854, 2044, 960, 2787, 1638, 3187, 510, 235, 608, 1950, 1387, 158, 1293, 1156, 473, 1104, 2767, 497, 994, 1028, 3023, 493, 961, 1002, 2482, 2428, 2640, 486, 1752, 1992, 408, 59, 796, 2273, 2688, 3000, 2599, 1036, 1269, 639, 848, 171, 970, 1678, 1016, 1141, 1522, 2309, 2764, 2810, 1228, 1551, 2553, 2970]. search-as-you-type [486]. search-based [796]. Search-by-Classification [3381]. searchable [1963]. Searching [422, 2389, 4072, 3795, 504, 875, 126, 757, 649, 458, 508, 74, 1260]. Searchlight [1315]. Seasonal [3271]. Seasonal-Trend [3271]. Seattle [2475]. Second [3326, 4272, 4036, 2932, 1561, 1629]. second-order [2932, 1629]. secondary [2479, 1570, 2196]. SECONDO [765]. SECRET [360]. SecretFlow [3843]. SecretFlow-SCQL [3843]. secrets [1827]. Sectric [4215]. SecuDB [3837]. Secure [775, 342, 4347, 3843, 3353, 2276, 3560, 3274, 3291, 4205, 3346, 4043, 3549, 3240, 3290, 3917, 3718, 1684, 2109, 2275, 1389, 3111, 3085, 2162, 2112, 2896, 2947]. SecureFiles [106, 296]. securely [2857]. securing [2197]. Security [4244, 2224, 2176, 1119, 953, 2478]. security-aware [1119]. SEDA [118]. SeeDB [1029, 1150, 1450]. seeds [1308]. seeking [499]. seen [1734]. SEER [3897, 4027]. Segment [3309, 3626, 211]. Segment-based [211]. Segmentation [3690, 845]. Segmented [3687]. SegPQ [4241]. Seiden [3338]. Select [4048]. Selecting [1894, 2262, 782, 1364]. Selection [3745, 4031, 3882, 3469, 3675, 3645, 3425, 3620, 3946, 3464, 3449, 3896, 3149, 1582, 697, 580, 20, 2405, 921, 2433, 2703, 2790, 418, 2719, 2417, 2550, 2449, 2052, 2496, 808, 2641, 1219, 2271].

selections [3014]. Selective [2920, 1340, 3634]. selectivities [1834]. Selectivity [2117, 1230, 4099, 2421, 20, 1910, 2520]. SeLeP [3698]. Self [3780, 3706, 3482, 4263, 4317, 4129, 3820, 3197, 3400, 3797, 2062, 2815, 1518, 1781, 1467, 287, 3116, 2783, 3180, 716, 1512, 428, 2717]. Self-Decoding [4263]. self-describing [287]. self-designing [2815]. Self-Driving [3482, 3820, 3797, 2783, 3180, 2717]. self-expanding [716]. Self-Join [3706, 1518]. self-join-free [1467]. self-linking [716]. Self-Managing [3780]. Self-Organizing [4317, 716]. self-regulating [1781]. Self-Service [4129, 2062]. Self-Supervised [3197]. Self-Training [3400]. self-tuning [3116, 1512, 428]. Selfish [3159]. SEMA [1337]. Semandaq [131]. Semantic [3516, 4185, 4029, 3733, 3285, 1110, 3265, 4344, 1522, 3698, 504, 900, 430, 957, 904, 1833, 1945, 2133, 3080, 2705, 991, 2445, 2509, 634, 315, 2005, 1906, 1068, 1178, 2394, 580, 83]. Semantically [4353, 1337, 2162]. semantically-related [1337]. Semantics [3295, 4236, 4239, 4148, 2770, 233, 360, 2088, 505, 1837, 1980, 558, 2605, 2448]. Semantics-Aware [3295]. Semi [3382, 3343, 3400, 612, 936, 1607, 1513, 2377, 1508, 829, 1916, 1988, 1830, 1520, 2380, 2313, 1396, 3169]. semi-asymmetric [2377]. Semi-automatic [612]. Semi-Decentralized [3343]. Semi-lazy [936]. semi-leader [3169]. semi-metricity [1508]. Semi-Oblivious [3382]. semi-sorted [1830]. Semi-Structured [3400, 1607, 829, 1916, 1988, 2380, 1396]. semi-supervised [1520, 2313]. Senbazuru [895]. Sense

[3526, 1180, 136]. sensed [918]. Sensitive [3231, 3215, 3549, 3712, 1452, 805, 541, 1828, 1464, 966, 1959, 608, 994]. sensitivity [2524, 1057, 2918]. Sensor [3569, 453, 1816, 183, 184, 3102]. sentiment [2535, 3104]. sentinel [502, 2457]. Separate [3626]. separated [2307]. Separation [4057, 3034]. SepHash [3626]. sequel [1439]. Sequence [3197, 4024, 2108, 972, 187, 1002]. sequences [1105, 10, 851, 353]. Sequential [218, 1795, 1643, 1739, 1068, 2336]. sequentially [2097]. Serial [3587, 70, 576, 694]. Serializability [4154, 694]. Serializable [731, 4220, 4176, 1323, 2168]. Series [3897, 3566, 3884, 3492, 3143, 4221, 3259, 3252, 3570, 4097, 3601, 3983, 3901, 3962, 3690, 4130, 3271, 4090, 4308, 3458, 3889, 3421, 4185, 4034, 4200, 3572, 3929, 3864, 4354, 3700, 3982, 3510, 3584, 3489, 3721, 3955, 4171, 4003, 3219, 3993, 3768, 3447, 3425, 4025, 4217, 4105, 3976, 3439, 4142, 3703, 4351, 3449, 3896, 3579, 3899, 3600, 3849, 3543, 3673, 3786, 239, 2685, 1234, 3178, 2393, 3115, 1901, 2853, 2823, 711, 1222, 153, 1261, 2172, 2050, 2292, 2961, 1011, 2026, 2949, 2858, 2692, 1960, 1071, 2318, 2506, 1885, 374, 3041, 3111, 2342, 2039, 2788, 2916, 1642, 2912, 2169, 2938, 3019, 1378, 178, 1742, 2944]. series [2985, 1951, 2899, 845, 3109, 2882, 2972, 2539, 3102, 843, 1779, 1716, 1398]. Series2Graph [2393]. Server [4302, 479, 3383, 4345, 1774, 1129, 278, 139, 1877, 1371, 884, 115, 306]. Serverless [3847, 3507, 3970, 3288, 3944, 2966, 2930, 2905]. servers [342, 2143, 3017, 468, 259, 2397, 1510]. Service [3532, 3503, 4191, 3536, 4129, 3846, 3618, 3479, 3904, 3665, 4170, 2198, 1526, 1986, 2062, 1005, 3061, 892, 1768, 2011, 1220, 1969, 3003, 800, 1283, 876, 2802, 2437, 2964, 2051, 3073, 1978, 1141]. Services [3386, 4094, 3844, 3431, 3829, 4247, 3437, 4286, 2712, 775, 1176, 1038, 877, 697, 2192, 1006, 1586, 124, 2014, 953, 1335, 1863, 1926, 192, 2664, 176, 2583, 257, 2333, 2191, 2460]. Serving [3433, 3564, 3195, 2978, 2966, 2227, 104, 1850, 2687]. Set [195, 1918, 4285, 3291, 398, 3369, 4121, 2351, 3225, 3544, 2468, 2637, 2425, 2454, 1482, 534, 817, 2519, 20, 248, 1246, 225, 2648, 464, 1505, 2439, 1639, 1107, 1688, 13, 1705, 1486, 2136]. set-based [1688, 2136]. Set-Valued [4121, 2351, 248, 13]. Sets [3388, 103, 1035, 1720, 206, 1719, 2210, 1231, 1445, 2522, 1342, 3186]. SetSketch [2661]. Setting [4062]. settings [1899, 2918, 2448]. seven [1314, 1460]. seven-dimensional [1460]. several [1544]. sextuple [83]. shackles [1403]. SHACL [2982, 3813]. Shades [4180]. Shadow [4336]. ShadowAQP [3533]. shadowing [2991, 2099]. shape [1603]. Shapelet [3572]. Shapelet-Based [3572]. Shapelets [3929]. Shapes [3813, 3243, 2982]. Shapesearch [1991]. Shaping [3525]. Shapley [4045, 4193, 3018, 3794, 3674, 3290]. SHARC [219]. Shard [3292]. Sharded [3457]. Sharding [3292, 4128, 2660]. Share [3089, 2846]. share-and-aggregate [2846]. Shared [1039, 3669, 4214, 1282, 2391, 3918, 3448, 79, 1972, 2758, 555, 2157, 1566, 1118, 933, 1492, 565, 67, 53, 1956, 1507, 619, 1353, 2333, 3164, 2057, 243, 2476]. Shared-Everything [3448, 565]. shared-memory [1566, 933, 3164]. Shared-Nothing

[3448, 1118, 1507, 1353]. Shared-Nothing/Shared-Everything [3448]. shared-route [2476]. Shared-Storage [4214]. SharedDB [616]. Sharing [3441, 1283, 3461, 1417, 832, 4300, 2384, 388, 3939, 4194, 2665, 1005, 2000, 1174, 1880, 2391, 384, 2628, 51, 1966, 2887, 3050, 2191]. Sharing-aware [388]. shedding [2848]. sheep [2783]. Shelf [4138]. Sherlock [1976]. Sherpa [2252]. SHEVA [3519]. Shift [4143, 3187]. Shifting [4245, 1486]. shipping [1865]. SHOAL [2190]. shoppers [327]. shopping [2354, 1784]. Shore [891]. Shore-MT [891]. short [861]. Shortcuts [4225]. Shortest [4204, 407, 4023, 630, 2579, 3775, 606, 3742, 3009, 602, 1508, 1008, 1466, 1868, 2423, 3045, 2526, 2306, 2968, 518, 1633, 2132, 2702, 2118, 2077, 2859]. Shortest-path [3009]. Shot [3750, 3271, 3922, 4136, 3744, 3914, 2988, 2965]. should [2101]. Show [1200]. Showcase [3507]. Showcasing [3476]. Shrink [1670]. Shrinkwrap [2064]. shuffle [2122]. shuffler [2478]. shuffler-based [2478]. Shuffling [3684]. Si [1588]. Siberia [976, 1085]. side [2448]. Sieve [2436, 3409]. SIFTER [3170]. Sigma [3107]. SigmaKB [1605]. SigMatch [444]. SIGMOD [2623]. signal [1930]. Signature [3369]. signatures [15]. Signed [3568]. Significant [3744, 1573, 430, 660]. Silicon [1617]. silification [2]. SilkMoth [1719]. Silo [3756, 3290]. Sim [3309]. Sim-Piece [3309]. SIMD [107, 1246, 1330, 202]. SIMD- [1330]. SIMD-scan [202]. SimDB [3125]. SIMformer [3994]. Similar [4042, 3401, 3309, 4072, 2144, 566, 2428, 2674, 3043]. similar-bicliques [3043]. similarities [74, 1003, 230]. Similarity [3426, 3282, 4041, 3716, 3252, 3589, 3709, 4117, 4006, 541, 3318, 2466, 510, 3369, 4251, 1104, 4239, 3994, 3225, 171, 3899, 3917, 2381, 239, 1930, 2832, 943, 3, 779, 711, 1518, 450, 1482, 2050, 2292, 2779, 2961, 641, 2133, 1918, 20, 1056, 3189, 794, 2419, 953, 225, 593, 2648, 398, 2039, 2063, 1993, 1505, 631, 1642, 2044, 508, 1097, 608, 1727, 158, 1293, 2363, 745, 1331, 1804, 2111, 994, 2860, 1028, 1318, 1248, 961, 448, 1705, 2482, 77, 1752, 408, 2135, 639, 1678, 1712, 1016, 820, 1522, 2970]. similarity-based [1804, 2111, 2860]. Simple [3550, 4154, 998, 3659, 3672, 3279, 3858, 3219, 3390, 1581, 2819, 3189, 1942, 2445, 2296, 1301, 2379]. Simpler [3950, 1003, 2476]. SimpleTS [3449]. Simplification [3999, 1698, 858, 1225, 1904]. Simplified [3684]. Simplify [3504]. Simplifying [3415, 3919]. simrank [1248, 820, 3589, 1706, 1454, 1836, 2420, 36, 1293, 2332, 2511, 1269, 1678, 35]. simrank-based [1248, 820, 3589, 1678]. SimRN [4117]. SimTab [2420]. Simulating [4345]. simulation [1977, 1099, 1563]. simulations [425, 3125]. Simulator [3871, 2120]. Simultaneous [3772]. Simultaneously [3797]. Single [2356, 3928, 4022, 3539, 3766, 4209, 3389, 3448, 3994, 3329, 1047, 1205, 1270, 626, 1453, 1836, 3008, 1803, 2332, 2834, 2511, 2807, 3032, 99]. Single-Layer [3994]. Single-Machine [3928]. Single-Node [3389, 2834]. single-page [626]. Single-Pass [4209, 1270]. Single-pubLisher [99]. single-source [1836, 2511]. single-threaded [3032]. SingleStore [3827]. SingleStore-V [3827]. SIR [3322]. SIR-GN [3322]. SiriusBI [4275]. site [266, 1195, 327]. sites [59]. situ [1792]. Situation [3930]. Size [591, 3533, 4324, 225, 541, 1285, 1352, 2100, 2599]. Size- [591]. size-bounded

[2599]. sized [2589]. sizes [2143]. SK [1066]. Skellam [2987]. Sketch [857, 3539, 655, 4058, 2672, 2519, 2917, 2241, 2626, 3102, 1749, 2493, 3380, 4058, 2917]. Sketch-based [857, 655, 3102]. Sketches [3214, 3314, 3914, 1708, 21, 1957, 776, 2616, 1917, 2581]. Sketching [3708, 3250, 3705, 3899, 1468, 2505]. SketchQL [3914]. SketchRefine [4195]. Skew [3237, 2959, 748, 286]. Skew-Resistant [3237]. Skewed [4279, 3779, 2489, 1384]. SkewTune [748]. skill [1319]. skills [294, 718]. SkinnerDB [2019]. SkinnerMT [3234]. skip [81, 2240]. skip-list [81, 2240]. Skipping [3340, 1663, 3409, 2841, 1159]. Skipping-oriented [1663]. SKT [2672]. SKU [3076]. skycube [528]. skycubes [415]. SkyGraph [1744]. Skyline [833, 1502, 1304, 929, 1750, 529, 1442, 221, 911, 1744, 1000, 1341, 177, 2947, 85, 451]. skyline-join [911]. Skype [1501]. SkyStore [4119]. SkySuite [911]. SlabCity [3404]. Slalom [1721]. SLAs [561]. SLEUTH [99]. Slice [4103]. Slice-Based [4103]. Slicing [387, 3158, 3920, 3960, 2269, 809]. Sliding [3577, 27, 3410, 3705, 3729, 655, 1281, 2126, 1501]. Sliding-Window [3410, 27, 655, 1281, 2126]. SlimChain [2668]. SlimDB [1830]. SlimShot [1498]. SLOG [2168]. Slow [4307, 3611, 4053, 1496, 2347]. Small [394, 3750, 4164, 4241, 4113, 680, 2143, 2791, 1286, 2589, 1130]. small-sized [2589]. Small-World [4113]. Smaller [4060, 2801]. smallest [2678]. SMART [631, 3734, 1402, 3584, 3248, 1299, 2392, 915, 1136, 4320]. SmartBench [2392, 3105]. smarter [715]. SmartLite [3564]. SmartMonitor [915]. SMCQL [1684]. SMDM [315]. Smile [2244]. Smirnov [2610]. Smoke [1888].
smoothing [804, 1742]. Smoothness [3393]. SMPC [4324]. SMR [4128]. Smurf [2062]. Snapshot [3273, 2088, 3261, 3244, 1087, 3174, 259, 731, 2278, 1701]. SnapToQuery [1328]. Snarcase [3875]. SNARF [2933]. Sniffer [3479]. snippet [114]. SnipSuggest [514]. Snorkel [1855]. Snowflake [4295]. snowstorms [1132]. SNP [464]. SNPs [464]. Snuba [2058]. SOA [82]. SOA-based [82]. Social [552, 3379, 3984, 1747, 3863, 3232, 3932, 3930, 2413, 2694, 855, 1291, 1732, 2531, 234, 2370, 568, 1021, 2914, 1927, 2958, 875, 1433, 778, 873, 813, 578, 2871, 12, 332, 3177, 2354, 1175, 1034, 706, 997, 1713, 550, 670, 893, 1279, 325, 1387, 811, 1023, 473, 3013, 2115, 947, 1307, 1695, 1148, 546, 524, 1171, 1244, 1682, 1712, 786, 1310, 3053, 2378, 2833]. social-aware [2354]. social-network-driven [1171]. social-temporal [546]. socialite [992]. socially [136, 235]. socio [2049]. SODA [650, 3291]. soft [272, 1536]. softmax [2806]. Software [2577, 7, 2155, 2185, 160, 1436, 1170]. Software-defined [2577, 1170]. soliciting [796]. solid [280, 2300, 446, 596]. SOLOMON [499]. Solution [4275, 3150, 3240, 2869, 951, 323, 2789, 1198]. Solutions [4354, 3934, 4351, 1670]. Solve [4374, 1437, 2401]. solved [787, 1673]. Solver [3536]. Solver-In-The-Loop [3536]. Solving [2097, 3491, 4104, 720, 1995, 2825, 3072, 2280, 1221]. some [295]. Sometimes [4179]. sonar [1584]. Sonata [4220]. song [747]. sonification [2705]. SOPS [1155]. Sort [3803, 4353, 285, 661, 1009, 1351]. sort-merge [661]. sorted [1830]. Sorting [3324, 98, 3655, 107, 1330]. Sortledton [2897]. sorts [573, 1037]. Sound [2705].

Source [3715, 4045, 3393, 739, 1210, 1792, 216, 197, 2587, 880, 1146, 2842, 23, 132, 1836, 2389, 2722, 2684, 2332, 1259, 2511, 3644]. Sources [3424, 3475, 9, 440, 846, 2008, 460, 782, 1302, 798, 826, 129, 1882, 1013, 414, 618]. sourcing [1232]. Space [4207, 3330, 3668, 3767, 3362, 2519, 3380, 3260, 3651, 1710, 3328, 3957, 3810, 3191, 3958, 3573, 3994, 231, 1912, 2914, 917, 2403, 2567, 1441, 528, 2655, 795, 960, 1830, 2659, 1516, 3170, 1221, 2813, 2127, 2679, 2277, 179]. Space- [2519]. Space-Efficient [3668, 3651, 3573, 3191, 1912, 1830, 3170, 2277]. Space-Filling [3328, 3957]. Spaces [3356, 4039, 3315, 1902, 1667, 2392, 1993, 119, 745, 2970]. SpaceSaving [3591, 2900]. spaceship [119]. Spade [2207, 3199, 3870, 3857]. SpagoBI [880]. spam [1648, 754]. span [2547]. SpannerLib [3877]. spanning [3057]. Sparcle [3720]. Spark [3811, 3826, 4016, 1380, 1571, 2714, 2769, 1519, 3113, 1607, 2877, 1470, 1960, 3436, 2879, 3830, 2188, 2317, 2745, 1444, 2874]. SparkCAD [3113]. SparkCruise [2188, 2769]. Sparkly [3279]. SPARQL [4320, 3487, 1831, 1999, 3535, 1846, 1427, 1382, 2798, 754, 4085, 1519, 1522, 3612, 554]. SPARQLByE [1594]. SparqLog [3535]. Sparse [3979, 3434, 1946, 3173, 2927, 2284, 1681, 1137, 532, 843, 2817]. sparse-spectrum [1946]. sparser [1952]. SPARSI [966]. Sparsification [3575, 3347, 3963]. Sparsity [3559, 1912]. SPARTex [1390]. Spatial [3924, 664, 864, 797, 3054, 1358, 3720, 4359, 3704, 3247, 3348, 3215, 1229, 1820, 1459, 3934, 4153, 3335, 3868, 863, 2413, 2056, 1440, 1412, 373, 743, 2695, 2869, 3025, 1162, 1155, 1586, 2440, 2845, 3004, 1309, 1941, 663, 1490, 198, 902, 1394, 1821, 1687, 2049, 714, 1463, 1116, 756, 437, 1339, 523, 3085, 1958, 2430, 520, 2184, 2221, 271, 3176, 1727, 1655, 3016, 449, 2156, 990, 1602, 962, 1084, 1540, 1740, 2896, 2020, 2861, 1501, 751, 3112, 3074, 3167, 1861, 2889]. Spatial-Aware [3704]. spatial-enriched [2845]. spatial-keyword [1155, 1463, 1501]. spatial-social [2413]. spatial-temporal [2869, 3016]. SpatialHadoop [902, 1358]. Spatialyze [3704]. Spatio [779, 3625, 4124, 3161, 1813, 2426, 641, 2587, 1759, 1672, 1425, 487, 1230, 2500, 843, 1194]. Spatio-Temporal [3625, 4124, 3161, 1813, 2587, 1759, 487, 2500, 1194]. Spatio-textual [779, 2426, 641, 1672, 1425, 1230]. Spatiotemporal [4088, 3871, 2192, 642, 2942, 643, 1145]. SpeakNav [2764]. SPECIAL [4043]. Specific [4154, 3518, 1814, 2158, 946, 1557, 2151]. specification [749, 1328, 160, 1026]. specifications [1451, 195]. Specified [4131]. spectral [3039]. spectrum [1946, 3734]. speculative [1777, 1179, 210, 2317]. Sped [4324]. Speed [4216, 3987, 3778, 3664, 4058, 877, 1888, 1471, 955, 399]. speeding [1483, 2655, 1273]. Speeds [4060]. Speeds-Distributed [4060]. Speedup [2218]. Speedy [3734, 2148]. SPG [3287]. Sphinteract [4051]. Spicy [312]. Spikes [3244]. spilling [452]. Spinning [678]. SPIRE [1168]. Spitz [2469]. SPJ [3014, 3558]. SPJA [1996]. SPJUA [356]. Split [4254, 2450]. SplitDF [3707]. Splitter [1068]. Splitting [3707, 3722, 1138]. Spooky [3042]. SPORES [2400]. spot [1465, 1700, 1175]. spotlight [2250]. Spread [3379, 3013, 2565, 2608]. Spreader [3778, 4058]. spreading [2075].

spreading-out [2075]. Spreadsheet [3501, 3508, 2146, 895, 3107, 2559]. spreadsheets [1420]. SQL [479, 111, 1435, 308, 494, 3275, 3432, 1774, 2237, 4270, 3503, 3386, 823, 2064, 650, 3076, 2125, 1596, 1129, 3433, 1945, 4311, 3951, 1118, 2981, 3462, 287, 3281, 2704, 3629, 4098, 4254, 898, 1837, 278, 2594, 718, 442, 3398, 113, 1874, 514, 2387, 1317, 2141, 1371, 3383, 1312, 702, 3515, 3793, 4301, 1650, 2836, 884, 4362, 1527, 2470, 1388, 1949, 1873, 2602, 3456, 2905, 2178, 4120, 2189, 2317, 482, 2459, 2745, 868, 3848, 4189, 2638, 115, 2171, 1161, 3518, 890, 3814, 1089, 4016, 3903, 3595, 4235, 3916, 254, 3502, 3986]. SQL-based [2836]. SQL-on-Hadoop [1435, 1118]. SQL-tuning-aware [442]. SQL/ [3986]. SQL/AA [1161]. SQL/MapReduce [287]. SQL/PGQ [4098, 3502]. SQLCheck [2726]. SQLite [3078, 1345, 1873]. SQLs [345]. Squall [1599]. square [660]. squared [2381]. SqueezePIR [3287]. SquirrelJoin [1733]. SRPQ [3622]. SRS [1221]. SSD [467, 917, 3283, 3384, 2602, 3008]. SSD-based [917]. SSD-enabled [3008]. SSDs [2512, 3344, 3937, 862]. SSTD [2426]. ST [1813]. ST-Hadoop [1813]. Stability [3379, 441, 2295, 110]. Stable [3654, 3226, 2431, 3369, 3411, 2059]. Stack [3835, 3624, 628]. Stack-based [628]. Stacked [2530, 1058]. stacks [1606]. Stale [1338]. staleness [637, 2956]. staleness-aware [2956]. stalls [2543]. stampede [1297]. Standard [3442, 113]. Standardization [3886]. Standards [4364]. Standby [4021]. Star [3357, 2984, 1702, 2137]. star-schema [2984]. StarDB [1381]. stare [1704]. Staring [1239]. Starry [3169]. stars [172]. Start [2053, 4321]. startups [3140]. StatAdvisor [279]. State [1772, 4366, 4078, 4364, 4151, 4362, 3465, 4274, 280, 1983, 2050, 2114, 2300, 3134, 3127, 2795, 446, 1268, 2390, 596, 2658, 3034]. State-of-the-Art [4366, 3134]. state-parallel [1268]. Stateful [2198, 3507, 3944, 4114, 1772, 1765, 2437]. statement [1873]. statements [2733]. Static [4012, 3764, 3748, 2534, 1818, 2904, 911]. station [3050]. statistic [660]. Statistical [712, 3519, 2069, 279, 604, 1531, 702, 1925, 544, 2216, 1117]. statistically [1573, 660]. statistician [2827]. Statistics [864, 4252, 2381, 1780, 1649, 1767, 2449]. Statisticum [1767]. staying [1803]. STBenchmark [133, 22]. STEED [1797]. Steered [3474]. Steering [3617]. Steiner [2573, 3949, 3190]. Steiner-Hardness [3949]. Stella [1815]. Step [3423]. Steps [3144, 4129]. Sterling [2022]. steroids [1865]. Stethoscope [746]. Still [4180, 4372]. Stingy [2917]. Stitch [1919]. Stitching [1754]. STMaker [1180]. Stochastic [3634, 3761, 614, 4195, 1651, 2374, 1090]. stock [1171]. Stone [3791, 616, 1008, 1660]. Stop [199, 3494, 1704, 2707]. stop-and-stare [1704]. Stopping [4080, 4061]. Stor [3846]. Storage [4178, 3273, 1076, 3324, 4097, 3375, 3323, 4230, 3294, 3553, 3260, 4214, 4185, 3277, 3986, 3937, 3828, 4005, 3961, 4119, 3647, 4184, 3636, 1012, 3791, 3696, 3905, 3829, 4140, 3554, 3437, 3604, 3288, 3792, 3655, 3046, 2954, 1299, 1336, 303, 1538, 280, 1972, 956, 2815, 1044, 555, 2677, 548, 426, 521, 3193, 2682, 914, 2266, 2609, 594, 1729, 2577, 2329, 1529, 1979, 43, 478, 2185, 1570, 3075, 1771, 852, 2791, 800, 824, 662, 2080, 2295, 2502, 80, 1657, 1193, 1830, 722, 716, 2040, 1603, 1348, 1875, 2563, 839, 2960, 385, 2453, 1048, 1920, 2568, 1089, 2087, 2972, 2668, 2633, 2404, 3171, 283, 595, 2973, 1773]. storage [2290, 2336, 2091]. storages [3070, 2406]. Store [3213, 3283, 4279, 3157, 3990, 4095, 3627, 3585, 2607, 1983, 2761, 465, 1566, 1850, 2067, 952, 2598, 742, 1344, 869, 722, 2229, 154, 1653, 3171, 2976, 2240, 1163, 726, 1446, 140, 1242]. Stores [4178, 4144, 3598, 3373, 3534, 3370, 3727, 2967, 2365, 1409, 1973, 950, 2102, 614, 838, 563, 1546, 2910, 2744, 2341, 2790, 1869, 2774, 1756, 1631, 2888, 1553, 1300, 2373, 1170, 1326, 2849]. Storing [1103, 952, 293]. Story [3525, 3435, 620, 1262]. storytelling [324]. straight [1508, 1171]. strategies [1050, 1135, 413, 860, 3031, 2315, 1669]. Strategy [3223, 3159, 4240, 243]. stratification [251]. Stream [2073, 3656, 4106, 3270, 3538, 4198, 3567, 4009, 3855, 4148, 865, 2770, 2094, 360, 1024, 1772, 190, 908, 1781, 857, 2768, 1864, 1634, 729, 2294, 1736, 479, 48, 25, 997, 1887, 2390, 1425, 1932, 484, 165, 911, 176, 1765, 989, 1799, 913, 150, 1122, 2834, 931, 1233, 2136, 2079, 174, 463]. stream-based [165]. Streaming [1953, 4187, 3621, 1518, 828, 3690, 4083, 3622, 3751, 4365, 1468, 3376, 3680, 3431, 4299, 3455, 815, 994, 4243, 4250, 4105, 4115, 3729, 4297, 2013, 454, 620, 610, 2662, 2621, 1667, 2097, 1163, 1670, 2129, 2426, 574, 2540, 462, 2765, 26, 2114, 2965, 1969, 113, 2578, 742, 2391, 1446, 2904, 2514, 3181, 3191, 941, 177, 2626, 1664, 1230, 2565, 243, 582]. StreamInsight [479]. StreamOps [3431]. Streams [3577, 3214, 3640, 4266, 3339, 3569, 189, 3385, 4009, 3778, 3202, 4058, 3263, 427, 1748, 1234, 2748, 2552, 1160, 359, 152, 1652, 188, 828, 182, 776, 1564, 27, 1105, 2506, 1267, 319, 1643, 1964, 2431, 717, 3056, 2385, 655, 2629, 178, 1256, 1791, 2115, 455, 1543, 2494, 567, 1847, 1695, 452, 2061, 931, 1749, 49, 361, 588]. StreamTX [26]. strength [605]. strength-aware [605]. Strictly [3734]. Strictly-Deterministic [3734]. Strider [1799]. strike [985]. Strikes [3770]. String [1056, 3679, 213, 2462, 2452, 2062, 2554, 334, 2520, 634, 1520, 2111, 1839, 1260, 448, 2135]. String-Key [3679]. Strings [3800, 576, 1381]. Strong [2256, 4141, 3279, 3068, 1214, 395, 1881]. Strongly [3643, 3450, 1850]. strongly-typed [1850]. Structural [568, 4238, 3621, 3405, 15, 3322, 149, 2566, 689, 12, 968, 2537, 829, 915, 2663, 142, 493, 1853, 1396, 3029, 230]. structural/attribute [230]. Structurally [4072, 2020]. Structure [4187, 3943, 3270, 3376, 3287, 4084, 3539, 3626, 3955, 3655, 200, 41, 2530, 2897, 924, 426, 979, 2479, 1066, 2825, 1359, 611, 700, 452, 2380, 1016]. Structure-Aware [4084]. structure-based [452]. Structure-Private [3287]. Structured [4178, 3550, 1433, 3422, 4258, 196, 3400, 3506, 3960, 491, 1103, 1607, 629, 2322, 829, 490, 1916, 2838, 122, 2167, 1869, 3130, 2331, 1988, 328, 2040, 44, 1875, 1318, 2561, 228, 1243, 656, 3028, 40, 1048, 1797, 2380, 1396, 633]. structureless [1051]. Structures [3679, 3529, 1263, 2512, 2847, 2217, 1330, 15, 821, 1094]. STsCache [4185]. Stubby [672]. Student [3473]. Studies [4332, 3605, 1165]. STUDIO [923]. Study [3635, 4183, 4080, 3819, 4193, 3987, 3318, 3605, 3724, 1953, 1846, 727, 2065, 1004, 1697, 382, 2287, 1350, 1868, 821, 1286, 1959, 2429, 2915, 1307, 2918, 1117, 1904]. Studya [3382]. Studying [159]. Style [4355, 601, 728, 54]. Stylus [1850]. Styx [4315]. Sub

[3428, 3904, 2681, 2608, 1637]. sub-datasets [1637]. Sub-Operators [3428, 2681]. sub-sampling [2608]. subarray [2113]. subexpressions [1894]. Subgraph [3596, 3643, 3818, 3975, 4165, 3293, 4007, 3691, 4253, 1848, 3671, 4192, 4239, 3753, 3666, 3388, 3459, 3714, 2840, 4012, 4050, 4223, 1886, 620, 610, 2258, 2540, 1047, 2166, 3131, 1788, 3098, 1355, 1327, 1305, 1646, 2121, 790, 2164, 2588, 1744, 1273, 1638, 2139, 2045, 32, 638, 2497, 2915, 2992, 40, 2006, 3020, 639, 445, 2441, 554]. Subgraph-Based [3388, 3020]. subgraph/supergraph [2006]. Subgraphs [3146, 1573, 1449, 3015, 2371, 1636, 2379, 786]. subgroup [2354]. subject [1352]. Subjective [2138]. submodular [2624]. subnet [2929]. subpopulation [3056]. subquery [284]. Subsampled [3989]. subscribe [37, 1155, 38, 811, 1501, 1055]. subscribed [3003]. subscriber [1134]. Subsequence [4233, 4105, 3703, 2393, 2748, 2621, 2919, 747, 704]. subsequences [1643]. Subset [3223, 4001, 2410]. Subset-Based [3223]. subsets [2200]. subspace [151, 785, 276]. substitutions [2458, 3188]. SubStrat [3223]. substring [3048, 793]. substrings [660]. Substructure [3981]. Substructure-Aware [3981]. substructures [1788]. Subsumption [3859]. subsystem [852, 2763]. Subtrajectory [3401, 2419, 2428]. success [587]. success-tolerant [587]. Succinct [2983, 3807, 2161, 2196]. SUFF [3293]. Sufficient [4010]. Suffix [2462, 576]. suggestion [8, 1479, 1405, 3013]. Suitable [4266]. Suite [4180, 3911, 4028, 880, 502, 2938]. sum [663, 2400]. sum-product [2400]. summaries [232, 1427, 591, 2418, 2210, 1989, 2328, 3087, 3035, 2945, 149]. Summarization [3726, 3663, 3270, 582, 4108, 1423, 206, 2801, 2066, 2838, 1725, 1976, 1387, 2036]. Summarizations [3709]. Summarizing [1818, 2802, 981, 223]. summary [2925, 2449, 1755]. summary-based [2925]. Summingbird [1131]. Sundial [1931]. Super [3778, 4058, 2288]. super-operators [2288]. Supercharge [3522]. Supercharging [652]. supergraph [2367, 2006, 848]. Supervised [1212, 3197, 2953, 2580, 1916, 1520, 2313, 2715]. Supervision [3264, 4045, 3162, 1855, 2058]. Support [3657, 3846, 1041, 105, 454, 2244, 37, 522, 2797, 2208, 3010, 1470, 2614, 1406, 1563, 945, 925, 1379, 1734, 154, 1450, 385, 1089, 1141, 936]. supported [2337]. Supporting [3487, 3503, 964, 982, 1321, 2344, 4327, 818, 3242, 3448, 2269, 2525, 1168, 1095, 2278, 751]. SUREL [3388]. surface [3019, 84, 1694, 263]. surfing [317]. surgery [1590]. surprise [2262]. surprising [1866, 1301]. Surprisingly [3279]. Surrogate [557, 4316]. Survey [4183, 4110, 4010, 1831, 1918, 776, 1872, 2640]. survival [2973]. Sustainable [4267, 4363]. swans [154]. swap [1332]. swapping [2203]. Swarm [405]. SWAT [3727]. sweep [1741]. SWIFT [2061, 3923]. SwitchTx [3027]. SWORS [743]. SWS [2869]. SXPath [523]. Symbolic [3781, 4351, 3790]. Symmetric [2588, 1004]. symmetrically [2355]. Symphony [3940]. synapse [2879, 2763]. Synchronization [4246]. Synchronized [3212]. SyncSignature [3189]. Synergetic [4071]. Synergistic [2171]. synergy [2024]. synopses [776, 1910, 2629]. synopsis [1838, 2156, 4043]. syntactic [1520]. syntactically [682]. Syntax [3848]. Synthesis [3404, 3308, 3996, 3562, 3619, 872, 1668, 2657, 2403, 2634, 1320, 2204, 1915, 2638, 2335]. Synthesization [3773]. Synthesized [3797]. Synthesizer [4252, 1174]. Synthesizing [3423, 547, 3857, 1849, 3488, 3371, 3086, 3030, 2688]. Synthetic [4358, 3310, 3548, 3284, 4314, 3686, 4142, 3006, 2003]. synthetically [1624]. Synthetising [969]. System [3440, 3535, 3945, 886, 3598, 3902, 3512, 3827, 3834, 4278, 4313, 3649, 3160, 4332, 3561, 3923, 4083, 3926, 3224, 4230, 3968, 3922, 4110, 3704, 3689, 3147, 3986, 3885, 3969, 4268, 3564, 3499, 3928, 4022, 3479, 3904, 3582, 3597, 3452, 3368, 3509, 3931, 4288, 3472, 3468, 3480, 3890, 3812, 4107, 4318, 3918, 3352, 3616, 4342, 3485, 3782, 3895, 3898, 3896, 3903, 3555, 3268, 3437, 3797, 3893, 4237, 3927, 3727, 3521, 3732, 4015, 3907, 3915, 3917, 3519, 2712, 1871, 2816, 1903, 863, 739, 3024, 934, 1640, 1844, 118, 1907, 900, 1395, 1573, 743, 1972, 2244, 1163, 2695, 1263, 895, 908, 1155, 1391, 1985, 2348, 2426, 2706, 3068, 3108, 2989, 522]. system [875, 1195, 995, 6, 1411, 2172, 2872, 2677, 899, 1394, 1397, 131, 1598, 2868, 2176, 288, 2194, 2723, 2187, 1375, 143, 2528, 3079, 885, 1809, 1389, 2485, 304, 3116, 114, 1114, 2004, 2000, 1179, 1857, 1049, 1529, 2210, 140, 1609, 921, 478, 186, 747, 1383, 2032, 2316, 1177, 48, 3067, 1826, 477, 1982, 1980, 2235, 2762, 2932, 3111, 2337, 2727, 1196, 127, 659, 1406, 2242, 137, 2228, 756, 120, 1563, 1504, 1425, 851, 3130, 165, 1588, 1577, 2319, 2719, 2664, 2417, 2550, 2181, 3085, 762, 2602, 2783, 3005, 3001, 2863, 2174, 2730, 1976, 1553, 993, 324, 1567, 1603, 2752, 909, 1666, 2808, 2053, 487, 1180, 1165]. system [1804, 2111, 1602, 656, 2020, 1142, 1363, 1784, 1797, 2006, 2005, 2051, 2100, 2605, 305, 2715, 3112, 935, 1992, 2721, 1170, 2707, 894, 3066, 3020, 1931, 822, 1145, 2591, 1746, 2230, 1194, 1127, 1776, 1978, 1984, 2297, 2469, 2696, 1658, 936, 2810, 2336, 1472, 106, 870]. system-generated [1472]. System-Wide [3727]. Systematic [4080, 3759, 3934, 1950]. SystemER [2174]. SystemML [1050, 1571, 1965]. Systems [4360, 3831, 3897, 3550, 4055, 147, 3338, 3442, 3576, 3867, 3523, 4154, 3218, 3337, 3862, 4245, 4284, 3525, 4365, 3578, 4068, 3720, 4373, 4150, 4260, 1182, 3421, 3936, 3702, 3241, 3538, 3820, 4291, 3977, 3865, 4033, 4053, 4369, 4273, 3447, 3913, 3685, 4009, 3905, 3542, 3620, 4361, 4210, 3637, 3790, 3327, 4345, 3595, 3543, 3606, 336, 1435, 2480, 2251, 2770, 661, 133, 22, 1921, 2796, 1237, 3141, 504, 1611, 2866, 360, 2272, 1500, 467, 1753, 37, 2848, 727, 1427, 2797, 774, 1368, 2398, 3021, 2140, 2891, 2457, 2818, 2682, 1096, 1303, 914, 1079, 1320, 2609, 1254, 2780, 2267, 652, 2150, 1430, 208]. systems [1552, 1606, 2784, 1111, 933, 1613, 2936, 25, 1223, 1856, 2247, 2831, 2085, 824, 2197, 1245, 1201, 1530, 1993, 2218, 662, 2080, 2295, 2502, 1932, 1731, 1619, 1041, 511, 2709, 1726, 1958, 2436, 579, 2408, 1189, 791, 1073, 2112, 1052, 1095, 150, 2339, 1258, 2883, 1242, 228, 3100, 2034, 346, 2583, 2960, 2453, 701, 3183, 1082, 2498, 2909, 1660, 2625, 2898].

T [2727, 4015]. T-Assess [4015]. T-cove [2727]. TAB [4171]. TabEE [3878]. Table [4341, 2465, 4238, 3883, 4346, 3351, 4118, 1895, 4248, 3364, 3580, 4293, 3692, 2411, 2507, 1368, 2937, 194, 1337, 979, 648, 3028, 202, 3084, 1202]. Table-to-Graph [4293]. tableaux [33, 505]. TableCopilot [4346]. Tables [3374, 3607, 3688, 3236, 4353, 3423, 3265, 3964, 45, 1644, 967, 291, 260, 1337, 1754, 458, 2538, 1580, 2638, 558, 3168, 1878, 2488, 2394, 1715, 3423]. **Tabular** [3878, 4358, 4031, 3958, 4322, 3920, 4226, 3838, 814, 3126, 3120, 2749, 4112]. **TabulaX** [4248]. **tag** [1648]. **tagged** [798]. **Tagging** [176, 495, 873, 2445, 59]. **tags** [703, 497]. **TaGSim** [2832]. **Tail** [4249, 3384, 2451, 2341, 1257, 1743, 647]. **Tailored** [4319, 4015, 2147]. **Tailoring** [2684]. **Tails** [3263]. **Tair** [3063]. **Tair-PMem** [3063]. **Take** [1348, 3894, 4046]. **Takes** [3277]. **Taking** [1968, 2693]. **tale** [340, 1619, 2994]. **Talk** [3525, 2471, 3139]. **Taming** [1327, 32]. **Tamper** [3837, 2521]. **Tamper-Resistant** [3837, 2521]. **Tanium** [2767]. **tao** [1962, 2761]. **TAOBench** [2958]. **tapping** [1216]. **target** [2688]. **targeted** [491, 1313]. **targeting** [306]. **Targets** [4047, 2553]. **TARGIT** [502]. **TARImpute** [4332]. **Task** [4332, 4091, 3247, 3411, 2440, 1941, 2609, 2158, 1344, 1631, 1740, 2546, 3348]. **Task-Aware** [4332]. **task-specific** [2158]. **Tasks** [3498, 697, 1697, 2515, 2951, 1319]. **Tat** [3159]. **tattle** [2994]. **tattle-tale** [2994]. **Taurus** [3430, 2498]. **taxonomic** [2632]. **Taxonomies** [3763, 603, 56, 652]. **Taxonomy** [4156, 2190, 185]. **Taxonomy-Guided** [4156]. **TC** [3753]. **TC-Match** [3753]. **TCO** [4302]. **TDE** [1922]. **TDSQL** [3834, 2228]. **tea** [3089, 2781]. **Teaching** [1549]. **team** [1319, 482, 3985]. **team-based** [1319]. **Technique** [3979, 265, 1681]. **Techniques** [4182, 3304, 3910, 4266, 3889, 3363, 508, 3444, 3464, 3605, 900, 321, 1005, 1358, 2092, 3131, 548, 380, 2180, 2318, 2855, 1934, 702, 3129, 36, 1505, 3130, 2879, 1726, 1509, 3001, 155, 158, 2156, 2962, 1820]. **technologies** [247, 315]. **technology** [2251, 2681, 916, 502, 299]. **TeCoRe** [1805]. **TED** [3670]. **TEE** [4347]. **telco** [903, 1367, 877]. **telecom** [1134]. **TELEIOS** [767]. **Telemetry** [3913]. **TELESAFE** [4081]. **telescope** [925]. **Telework** [4081]. **tell** [1827]. **Template** [4197, 2131, 1937, 2764]. **template-driven** [2764]. **Templated** [3304]. **templates** [1167, 2653, 2856]. **templatic** [2561]. **Tempo** [1512]. **Temporal** [1480, 3593, 3312, 3623, 3625, 4124, 3657, 3322, 3266, 4216, 3633, 4167, 4084, 3148, 3161, 4035, 3755, 3787, 3254, 3757, 4037, 3555, 4194, 4229, 1813, 1252, 1789, 1901, 2023, 2869, 1805, 908, 2631, 3054, 1043, 2258, 2088, 984, 2950, 2587, 2038, 1759, 2858, 690, 897, 952, 1942, 405, 766, 2228, 3016, 2977, 1511, 487, 1701, 2500, 1064, 546, 1194, 1244, 2928, 1472]. **temporal-probabilistic** [984]. **temporally** [843]. **Tempura** [2484]. **Ten** [2031, 345]. **Tenant** [4158, 3003, 4159, 872, 1005, 2014, 1880, 1283, 1512]. **Tencent** [3834, 2242, 3452, 1197]. **TencentCLS** [3073]. **TENDS** [3896]. **TENET** [4322]. **TenGraph** [3942]. **Tensor** [3978, 3942, 3955, 2591, 3206, 3089, 2820, 3022, 1690]. **Tensor-Based** [3942]. **Tensors** [2627]. **teql** [2850]. **Terabytes** [4272]. **Teradata** [2757, 2189]. **Teradata(R)** [1565]. **TeRec** [908]. **TERI** [3574]. **Termination** [3382, 1485, 348, 251]. **terms** [642]. **terrain** [1166, 1166]. **Terrain-Toolkit** [1166]. **terrains** [1008, 1466]. **territorial** [877]. **Teseo** [2663, 2566]. **Test** [3525, 3587, 2610]. **Test-of-Time** [3525]. **testbed** [1025, 307]. **Testing** [4154, 4029, 3783, 4114, 3606, 1692, 253, 860, 1422, 32, 3069]. **Texera** [3124, 3812]. **Text** [3325, 3629, 3926, 3906, 3964, 4235, 78, 459, 1247, 56, 2210, 122, 927, 14, 393, 488, 960, 1976, 2005, 1906, 322]. Text-to-SQL [3629, 4235]. TextCube [2219]. textual [779, 1391, 2426, 1490, 641, 1672, 1425, 1230, 1597, 1141]. TF [3279]. tf.data [2756]. TF/IDF [3279]. TFB [3721]. tgds [2152]. TGL [2928]. th [2768]. their [1054, 64, 2349, 1081, 2594, 1787, 1763]. Them [3848, 883, 1215, 2629]. theme [2119]. Themis [3997]. Theorem [3405, 4175]. theoretic [2656, 2116]. Theoretical [4098, 2302, 2306, 2286]. Theoretically [4205, 1881, 3346, 2851, 2908]. Theories [3863, 2134]. Theory [4099, 4223, 255, 2481, 2892, 836, 770, 2296, 335, 2697]. Theseus [3115]. theta [671]. theta-join [671]. things [1301, 1923, 2743]. think [2253, 1018]. third [1167]. third-party [1167]. Thirteen [482]. Thoth [1177, 1802]. thousand [616, 345, 961, 1632, 1239]. thousands [1671, 2256, 1205]. thrash [708]. Thread [188]. threaded [3032]. threat [165]. three [2327, 821]. Threshold [2892, 2552, 826, 516]. thresholded [2044]. Thrills [3528]. Throughput [4123, 2372, 1789, 465, 2467, 539, 707, 2598, 2078, 2548, 1879, 1326]. ThunderRW [2642]. TIAMAT [321]. ticket [125]. tier [1329]. Tiered [3598, 3905, 2266, 2609, 1979, 2087]. ties [1324]. TIGER [3728]. Tigger [3419]. Tight [4007, 2624, 2342, 1755, 2351]. Tighten [3384]. Tightened [3684]. Tighter [21, 2420]. Tile [3594]. Tile-based [3594]. TileDB [1657]. Time [3897, 3566, 3884, 3492, 1590, 3143, 4221, 3259, 3980, 4233, 3570, 3433, 3574, 3818, 4097, 3601, 3983, 3817, 3901, 3962, 3690, 3669, 3525, 4130, 3271, 4090, 4308, 3199, 3870, 4272, 3458, 3889, 3421, 4185, 4034, 4038, 4200, 3572, 3929, 3864, 4312, 4354, 2793, 3700, 3982, 4138, 4033, 3510, 3489, 3721, 3955, 4171, 4003, 3219, 3993, 3768, 3447, 3913, 3444, 4282, 3425, 4025, 4217, 3389, 3445, 4105, 3976, 2972, 3439, 4142, 3703, 3254, 3757, 3753, 4351, 3449, 3896, 3194, 1716, 3579, 3899, 4297, 3600, 3849, 3543, 3673, 3438, 3786, 654, 620, 2237, 239, 2685, 1234, 1496, 2320, 3178, 2393, 3115, 944, 1789, 1901, 2853, 2232, 2695]. time [2919, 1569, 1985, 2129, 2823, 711, 1810, 153, 1261, 2172, 1432, 1011, 2026, 363, 2949, 3011, 1369, 2012, 1115, 1125, 2871, 2922, 500, 2858, 139, 1220, 2692, 1960, 1071, 1430, 2318, 2506, 1371, 374, 1313, 1651, 1735, 2578, 3041, 3111, 2342, 301, 1406, 2788, 72, 464, 2916, 73, 1642, 176, 2912, 2169, 2938, 3019, 2499, 1378, 1841, 1974, 178, 1742, 2618, 2944, 496, 1968, 1559, 1156, 1568, 337, 725, 2985, 1540, 1740, 2494, 1951, 2899, 890, 1599, 481, 845, 1142, 1695, 2132, 3109, 856, 1206, 2882, 1164, 2539, 3102, 843, 1060, 1779, 2118, 1861, 2230, 1194, 783, 2611]. time-aware [783]. Time-Constrained [3753]. Time-Critical [3913]. Time-Dependent [3669, 2922, 1735, 1060, 2118]. Time-Range [3254]. Time-Series [3259, 4185, 3864, 4354, 3510, 3447, 3439, 4351, 3115, 711, 2788, 2169, 2938, 3019, 2539]. Time-Topology [3757, 2793]. Time-Travel [4033]. Time-Traveling [4038]. Time2Feat [3178, 3492]. TimeCSL [3929]. TimeEval [3109]. timely [2121]. Timeseries [4139, 2568]. Timestamp [3618, 3418, 2991]. timestamping [121]. timestamps [1523, 2949, 1511, 361]. TimeTrails [487]. TimeTravel [758]. timid [1556]. timing [2390]. tiny [1221]. tip [2515]. TiQuE [3337]. Tiresias [3046]. Tit [3159]. Tit-for-Tat [3159].

titans [1444]. TitAnt [2232]. Titian [1470]. title [1106]. titles [1106]. TMLKD [4136]. TMS [165]. TOAIN [1879]. TOD [3206]. today [2387, 100]. Together [4375, 1436, 1835]. TokenJoin [3225]. Tolerance [4331, 3403, 2941, 1634, 1998]. tolerances [747]. Tolerant [3348, 865, 587, 1521, 48, 2025, 2834, 1353, 810, 1127]. Tolkien [324]. Too [4307, 898]. Tool [3901, 4314, 1778, 1582, 303, 321, 906, 757, 132, 1401, 754, 490, 927, 318, 1783, 497, 3090, 1166, 2702]. toolbox [2182]. Tooling [2004]. Toolkit [3897, 3446, 1574, 1800, 1993, 1120, 117, 3109, 1166]. tools [2535, 3104, 2575]. Top [3892, 3345, 4334, 1222, 4007, 3904, 2371, 854, 811, 3592, 3921, 3950, 2694, 29, 1913, 901, 373, 1266, 469, 1006, 2113, 198, 424, 1340, 959, 985, 609, 1284, 2038, 288, 86, 248, 2814, 968, 3188, 2416, 27, 290, 1800, 1836, 3052, 785, 1819, 1899, 666, 586, 520, 1387, 2264, 1791, 2127, 1248, 372, 564, 1501, 2036, 417, 1213, 1036, 1503, 2271, 1311]. Top- [3345, 4334, 1222, 4007, 3904, 2371, 854, 811, 3592, 3921, 3892, 3950, 2694, 29, 1913, 901, 373, 1266, 1006, 2113, 198, 424, 1340, 959, 609, 1284, 2038, 86, 968, 3188, 2416, 27, 1800, 1836, 3052, 785, 1819, 1899, 666, 586, 520, 1387, 2264, 1791, 1248, 372, 564, 1501, 417, 1213, 1036, 1503, 2271, 2814]. top-down [985, 248]. top-n [290]. Topic [2413, 1278, 1896, 1449, 1383, 997, 298, 403, 1746]. topic-aware [1278]. Topic-based [2413, 1383]. topic-focused [997]. topic-subgraphs [1449]. topical [1247]. Topological [3985]. Topologies [3656]. Topology [3546, 3956, 3757, 2106, 2793, 598, 1992]. Topology-Aware [3546]. topology-based [1992]. Topology-Preserving [3956]. TopoX [2106]. Tornado [1425]. touch [1426]. TPC [2349, 2246, 888, 100, 1124, 3821]. TPC-C [2246, 100]. TPC-H [2349]. TPCx [3442]. TPCx-AI [3442]. tpmC [3066, 4290]. TQEL [2694]. TRACE [2578]. traces [31]. Tracing [3653, 2727]. Tracking [1043, 1449, 3418, 540, 730, 1787, 1418]. TraClass [89]. tractability [668]. tractable [836]. trade [2980]. trade-offs [2980]. Tradeoff [3391, 1336]. tradeoffs [2239]. trading [2401, 476]. traditional [2251, 2797]. Traffic [4101, 3625, 3985, 4135, 3664, 2186, 2587, 2800, 462, 301, 3016, 3125]. TrafficDB [1566]. Trails [4081]. Train [3635, 3017]. Trained [3351, 3676, 3696, 3711, 3333, 2487, 2584]. Training [3978, 3693, 4055, 3577, 3218, 4091, 3623, 4031, 4124, 3654, 3676, 4150, 3679, 3646, 4044, 4167, 3758, 3987, 3200, 3343, 3452, 3400, 3866, 3766, 3798, 3627, 3248, 4322, 3854, 3728, 3637, 3403, 4172, 2816, 1896, 2969, 2536, 2395, 2875, 2855, 2836, 2838, 2830, 2649, 2543, 3008, 2956, 1855, 2058, 2929, 3166, 2806, 2901, 2928]. Trajectories [3355, 2129, 1833, 1654, 1583, 2338, 2578, 1019, 74, 894, 1068]. Trajectory [4041, 3716, 3574, 3308, 4117, 4136, 1225, 3582, 1727, 3999, 3239, 3994, 1904, 3361, 3971, 4015, 2056, 1789, 2665, 1635, 1893, 2587, 2922, 1320, 88, 3067, 89, 1698, 858, 1059, 1180, 2265, 2500, 1752, 2173]. trajectory-based [89]. trajectory-driven [2173]. TrajStore [305]. TRAMP [456]. tran [3002]. TranAD [2899]. TraNCE [2713]. Transaction [3342, 4276, 3746, 4158, 4154, 4245, 4104, 72, 4188, 3733, 725, 4176, 3451, 3269, 4027, 4321, 891, 432, 2232, 2054, 2212, 1975, 539, 1254,

2614, 140, 3027, 2085, 192, 1446, 73, 423, 579, 1189, 2839, 1242, 2653, 3169]. transaction-maintained [1189]. transaction-time [73]. Transactional [3337, 4138, 4315, 3931, 3278, 4345, 1662, 1523, 2897, 691, 3086, 1, 2525, 1332, 2040, 1883, 385, 3183, 2909, 2336]. Transactions [3734, 3611, 4249, 3311, 3823, 4060, 4067, 3578, 3373, 4137, 3908, 4289, 4095, 4220, 4269, 3735, 1017, 2761, 950, 1679, 2148, 2308, 2246, 2137, 1030, 1787, 2168, 1095, 1968, 1209, 2668, 1685, 3032]. TransactiveDB [1216]. TransApp [3584]. Transducers [3781, 978]. Transfer [4325, 3616, 3583, 2842, 2402, 3187]. transferable [1620]. Transfers [4214]. Transform [1922, 3339, 480, 2432, 183, 2432]. Transform-data-by-example [1922]. Transformation [3776, 4141, 3150, 3481, 2067, 672, 1113, 1701, 2975]. Transformation-Based [3776, 672, 1113]. Transformations [3873, 4370, 3423, 4248, 1905, 213, 1922, 3031, 634, 1520, 1715]. transformed [2395]. Transformer [3983, 3200, 3584, 3711, 3994, 4247, 3786, 2584, 2899, 2935]. Transformer-Based [3584]. Transformers [3126]. Transforming [3762, 489, 376, 2713]. Transforms [3516, 1811, 1683, 367]. Transitional [3769]. transitions [2390]. Transitive [3672]. translating [1980]. Translation [2352, 4120, 2407]. translations [24]. Transmission [3844]. TransNet [2395]. Transparency [3268]. Transparent [3841, 3145]. Transportation [3799, 2510, 1130]. Transports [4272]. Travel [4033, 843, 3194]. Traveling [4038]. Traversal [4246, 3986, 3358, 2492, 1259].

Traversal-Join [3986]. Traversals [4177]. Traversing [2343]. treatment [2985]. Tree [4082, 3670, 3553, 3384, 446, 4039, 3562, 3712, 3655, 1103, 1208, 161, 2320, 1266, 3042, 2512, 162, 2060, 3189, 15, 3179, 576, 289, 600, 596, 646, 1318, 228, 1797, 2412, 2633, 2404, 633, 2859, 2898, 2973, 2935, 2810, 200, 3802, 3237, 1655, 3771, 3391, 4057, 50, 2451, 426, 449, 447, 375, 2948]. tree-aware [162]. tree-based [2320, 2412]. tree-structured [1103, 1318, 228, 1797]. TreeLine [3171]. Trees [4258, 4075, 3398, 3381, 3391, 4046, 986, 1132, 2446, 1288, 3057, 682, 2931, 2582, 2298, 181, 1201, 1914, 1881, 2573, 2843, 3190, 4077, 2340, 449]. TreeScope [1396]. Trek [4301]. Trekking [1085]. Trend [3271, 568, 1841, 1991]. trendlines [2330]. Trends [3864, 4363, 1616, 4361, 1021, 2779, 1817]. Trento [878]. Trentorise [876]. Triadic [4155]. triaging [2614]. Triangle [4115, 3204, 4215, 2560]. Triangle-Connected [3204]. Triangles [4020, 989, 1847]. Triangular [3379]. triangulation [517]. triangulation-based [517]. trickles [178]. Trident [2609]. Trie [3683, 3064, 448, 448]. trie-based [448]. Trie-join [448]. trigger [2557]. triggers [485]. Trill [1255]. trillion [2146, 1377, 692, 2260]. trillion-cell [2146]. trillion-edge [2260]. Trimming [4324]. Trinity [2204]. trip [935]. Triparts [4187]. triple [1863, 2790]. triple-factor [1863]. TripleBit [822]. TripleProv [1418]. trips [976, 1980]. Troubles [3007]. True [3337]. TrueTime [4095]. truly [1873]. Truss [1737, 3680, 4127, 3331, 640, 3204, 2388]. Truss-Based [3680, 1737]. truss-equivalence [1737]. Trust [3515, 1302]. Trusted [3353, 3347, 3341, 2224, 2857].

trustworthiness [1302]. trustworthy [3050]. Truth [217, 1434, 1759, 787, 1673, 499, 1257, 1882, 618]. TSB [2938]. TSB-UAD [2938]. TSCache [2788]. TSDB [3447]. TsFile [3849]. TSGAssist [3884]. TSGBench [3566]. TSM [3421]. TSM-Bench [3421]. TsQuality [3489]. Tsunami [2489]. TUCKET [3955]. Tuffy [544]. tumor [1763]. Tunable [2231, 3727]. tune [2903]. Tuning [3833, 4103, 4166, 274, 3874, 3689, 3241, 3436, 3538, 4159, 3811, 4061, 4328, 4109, 3658, 3583, 3797, 4, 2596, 2989, 442, 3116, 138, 2931, 3033, 2235, 2903, 2218, 2636, 3180, 273, 612, 2962, 1512, 2130, 2575, 2583, 3192, 428, 1978, 2946]. tunnels [1069]. tuple [2362, 1564, 963]. Tuples [4195, 3630, 1153, 1943, 26]. Tuplex [2215]. Turbine [3953]. Turbo [205, 3014]. Turbo-charging [205, 3014]. TURL [2507]. Turn [4344, 874]. turning [3128]. TuskFlow [4269]. Tutorial [3862, 3466, 1435, 2224, 3126, 145, 1183, 1614, 1823]. TVM [3594]. tweaking [2003]. tweening [1811, 1683]. tweet [908]. tweets [1156, 994]. twig [420]. Twin [4210]. Twisted [4210]. Twitter [926, 1125, 724, 997, 1559]. Two [3758, 418, 3982, 3791, 3369, 1660, 664, 2256, 689, 2997, 2582, 1008, 1914, 1619, 2991, 1329]. two-event [689]. Two-Fold [3982]. Two-Level [3369, 3758]. two-phase [2256, 2582]. two-tier [1329]. two-version [2991]. Two-way [418]. Type [645, 31, 3715, 3479, 3265, 4218, 2832, 486, 2394, 1141]. type-ahead [1141]. type-aware [2832]. Type-based [645]. typed [1850, 1650]. types [458]. Typos [3852].

UAD [2938]. UASMAs [464]. UbeOne [940]. ubiquity [1866]. UDA [1268]. UDA-GIST [1268]. UDAO [2209]. UDF [3965, 1346, 4173, 2585]. UDF-centric [1346, 2585]. UDFBENCH [4173]. UDFs [2178, 3049, 3498]. UDO [2799]. UFGTime [4200]. UFMG [2029]. UFO [316]. Uldp [3756]. Uldp-FL [3756]. ULISSE [2039]. ULS [1167]. Ultra [3649, 3647, 3853, 1972, 202]. Ultra-Fast [3649, 3647]. ultra-low [1972]. Ultra-Wide-Column [3853]. UltraLogLog [3668]. UlTraMan [1893]. UmbraPerf [4319]. unaggregated [206]. Unbound [3938]. Unbounded [3210, 1376, 1234, 2297]. unbundled [192]. Uncertain [4313, 711, 3267, 1183, 623, 3761, 4102, 3147, 436, 570, 29, 1870, 60, 1222, 426, 1088, 2090, 27, 560, 2104, 1431, 396, 2338, 513, 2274, 1899, 1019, 429, 68, 510, 2579, 1414, 414, 710, 455, 818, 30, 564, 270, 2822]. uncertain-data [436]. uncertainties [2675]. Uncertainty [4080, 4195, 3454, 1206, 687, 432, 167, 2931, 2639, 2262, 842]. Uncertainty-Aware [3454]. unchained [1303]. Unconstrained [2624]. uncracked [1010]. Under-Performing [4074]. Under-Represented [4074]. underlying [2217]. Understanding [4154, 1290, 2532, 3294, 979, 1697, 1681, 773, 996, 3770, 2339, 4142, 3920, 4089, 2375, 2465, 2507, 2512, 456, 2594, 2753, 1937, 2764]. undetected [1720]. undirected [3057]. unfairness [2711]. Unicorn [875]. Unified [3925, 3134, 3701, 3986, 4049, 4163, 4171, 3684, 3717, 3504, 3895, 4002, 4050, 1893, 2677, 2751, 1434, 2343, 1751, 2508, 2744, 724, 212, 2510, 2402, 3065, 2280, 1956, 2135, 2209]. uniform [2326]. unify [1268, 4049, 4318]. Unifying [3458, 2086, 2576, 3816, 1420, 2227, 353, 1373]. Unikernels [3702]. union [1895, 1664]. Unionable [3688]. unique [2425, 1027, 951]. uniqueness

[377, 2257]. units [553, 202]. univariate [2938]. Universal [943, 3428, 3451, 3449, 2897, 2457, 2525, 464, 2799, 1424]. Universal-DB [1424]. UniView [3895]. Unknown [4074]. Unlearning [3875, 3628]. Unleash [3979]. Unleashing [4087]. Unlocking [4277]. unordered [2999]. unpredictable [229]. Unraveling [4242, 4148, 1682]. Unreliable [3745]. unsound [320]. Unstructured [4238, 3422, 3984, 4343, 3385, 4318, 3559, 194, 945, 732, 414, 2767]. Unsupervised [2853, 4090, 3572, 3929, 3768, 3711, 4147, 2986, 2283]. Updatable [367, 3995, 2586, 3037]. Update [4082, 522, 3634, 3539, 4137, 4035, 645, 161, 186, 362, 840, 2315, 3171]. update-in-place [3171]. Updates [3959, 4075, 4133, 4039, 3490, 3662, 986, 620, 175, 421, 265, 2969, 1889, 2303, 577, 2358, 472, 862, 1001, 2948]. Updating [2245, 406]. upgrades [1908]. UPI [396]. UPLIFT [3031]. upload [913]. Upper [4007, 802, 1466]. Upsortable [1791]. Urban [4124]. URL [526]. URLs [18]. Ursa [4299]. usability [1380]. usage [2594, 850, 1847]. Use [3831, 3865, 878, 161, 2101, 2622]. used [3075]. useful [942]. User [3419, 3547, 3745, 3462, 3756, 940, 2103, 2893, 3278, 3488, 3371, 4051, 877, 1065, 1411, 3122, 2981, 287, 949, 729, 1179, 652, 1406, 2844, 393, 519, 1334, 1516, 2368, 818, 751, 85, 1648, 1597]. User-Bypass [3419]. User-Defined [3462, 2893, 3122, 2981, 287, 729, 2844, 818]. user-friendly [519]. User-Level [3756]. user-space [1516]. Users [4320, 3894, 650, 1175, 706, 3007, 428]. Using [3831, 3386, 3530, 3330, 3404, 480, 4311, 4078, 3394, 3715, 3634, 3212, 4118, 3224, 3405, 3398, 4077, 3423, 181, 3381, 3310, 99, 3200, 502, 3912, 3587, 3584, 533, 3599, 2787, 3681, 1557, 4327, 3913, 3615, 3355, 4176, 3921, 3812, 3145, 3307, 4213, 3809, 3317, 3255, 3988, 4286, 4147, 2620, 2381, 1607, 1886, 553, 1777, 1538, 2062, 699, 280, 195, 668, 2545, 1644, 41, 21, 69, 1635, 555, 967, 3631, 1340, 2069, 2117, 2421, 2403, 2458, 2133, 1484, 56, 1167, 3080, 2356, 505, 2187, 2567, 1320, 1337, 2858, 1468, 709, 2875, 210, 652, 2405, 479, 1834, 2367, 538, 921, 915, 577, 599, 48, 3048, 1267]. using [89, 528, 541, 4007, 702, 1231, 1887, 2703, 458, 657, 1578, 834, 2183, 2358, 1588, 2389, 185, 1917, 544, 978, 1744, 1000, 1341, 328, 648, 2162, 298, 2888, 2449, 589, 2184, 660, 862, 2189, 2547, 1097, 2520, 1333, 2363, 2021, 955, 840, 1139, 994, 2589, 2115, 493, 3030, 2546, 315, 1230, 2335, 2728, 2799, 3549, 202, 3947, 1878, 843, 1202, 2046, 2688, 4016, 1779, 1036, 2828, 2929, 671, 1171, 2973, 1658, 1253, 2134, 2364, 2611, 2810, 3732]. utilities [1443]. Utility [2066, 3557, 3303, 3903, 394, 433, 3018, 2478]. Utility-Aware [3557]. Utility-driven [2066]. Utilization [3239, 4367, 3839]. Utilizing [3879, 484]. Utopia [3883]. uTree [2451]. utterance [2741]. UWC [3853].

V [3827, 631, 3285]. V* [90]. V*-Diagram [90]. V-SMART-join [631]. Vacuum [2277]. Vadacode [4349]. Vadalog [1907, 3945]. Valentine [2749]. Validating [3243]. Validation [4276, 3813, 4009, 2982, 1837]. Valley [1617]. valuable [1618]. Valuation [3420, 4228, 2158]. Value [4178, 3213, 3598, 4332, 3283, 4279, 4180, 3157, 3569, 4193, 3990, 3794, 4048, 3290, 4286, 4057, 1294, 2685, 2607, 1973, 2125, 1983, 2815, 465, 950, 880, 241, 2341, 3018, 1869, 1388, 1756, 1830, 3170, 2373, 3542, 1694, 1653, 3171, 1326, 2240]. value-less [1388]. Valued [4121, 248, 2549, 13, 2351]. Values [4045, 3674, 1900, 377, 2318, 2506, 2827]. Vanilla [3994]. Vantage [2757]. Var [4255]. Var-Length [4255]. Variable [3539, 3703, 2039, 85]. Variable-Length [3703, 2039]. variance [381]. Variants [3491, 3367]. variations [2850]. Various [3895]. varying [2596]. VCF [4265]. VCR [3920]. VDMS [2787]. VecCity [4156]. Vector [3827, 4366, 4339, 4083, 4191, 4246, 4079, 3979, 4257, 4282, 4298, 3933, 3604, 3927, 3917, 2284, 2779, 2974, 3079, 1681, 1627, 2213, 202, 532, 4282]. vectorization [1835]. Vectorized [3374, 3858, 2037]. vectorizing [2279]. vectors [631]. veDB [4278]. veDB-HTAP [4278]. Vehicle [3561, 3256, 2656, 2186]. Vehicles [3853, 1776]. Velocity [3567, 1163, 644]. Velox [3065]. VeLP [3561]. VeriBench [3327]. VeriDKG [3612]. VeriEQL [3916]. VERIFAS [1856]. Verifiability [3327]. Verifiable [4067, 3301, 4162, 3473, 3268, 3612, 3718, 2116, 2947, 2469]. Verification [3330, 4289, 2212, 649, 2442, 1743, 237, 1967, 32, 2134]. verifier [1856]. Verifying [574]. VerIso [4067]. VersaMatch [3264]. Versatile [4370, 4146, 3434, 3091, 3067, 129, 1574]. Versatilely [4065]. Version [4270, 3021, 1447, 72, 2991, 1121, 1693, 375]. versioned [2278]. Versioning [3285, 1336, 1723]. Vertex [2124, 3641, 1390, 1273, 1091, 2573, 1018, 1342, 2600]. vertex-centric [1390]. Vertexica [1172]. Vertica [726]. Vertical [3262, 3352, 4228, 2969, 3179, 2412]. vertically [512]. verticals [1743]. Very [4054, 3350, 3243, 1831, 740, 1558, 576, 851, 338, 1232, 80, 3132]. VHP [2366]. via [3535, 2941, 2107, 8, 409, 3833, 1912, 2161, 2657, 232, 1649, 3359, 4086, 3725, 3663, 499, 1679, 2524, 3146, 2974, 613, 2969, 2562, 4104, 2519, 4336, 3533, 248, 3294, 2798, 3292, 1634, 3654, 3676, 2582, 4246, 2842, 3645, 804, 3679, 4136, 3689, 2190, 2655, 3569, 3697, 3639, 4200, 3287, 4312, 4167, 2366, 1527, 3758, 2402, 3630, 4084, 1908, 2830, 3982, 3626, 1721, 1592, 3008, 3302, 3370, 1742, 4018, 3779, 2802, 2667, 3685, 4134, 2860, 3013, 1688, 3627, 4197, 2019, 2557, 4244, 2400, 3378, 3517, 3731, 3684, 2196, 2975, 1798, 1213, 3641, 4142, 753, 4048, 1233, 2311, 3757, 3666, 4109, 428, 2136, 4089, 1495, 842, 2680, 2635, 3493, 3403, 3735]. via [3797, 3206, 3249, 1937, 936, 3606, 554]. Video [3338, 3788, 3531, 3469, 3675, 4208, 3704, 3339, 3471, 3198, 3914, 3470, 3488, 3371, 3594, 2723, 2012, 1924, 159, 1761, 2301, 158, 2438, 2743, 2297]. Video-Language [4208]. Videos [4101, 3588, 3054]. VIDEX [4304]. View [3286, 580, 3458, 2790, 3895, 4297, 4093, 775, 2943, 1736, 1338, 142, 1617, 2315, 2313, 4093]. viewing [326]. Views [3998, 4329, 3550, 653, 673, 366, 668, 279, 438, 1338, 422, 1558, 119, 1604, 320, 3007, 2450]. VIIQ [1405]. VINCENT [3098]. VINERy [1407]. Violations [4154, 4040, 3694, 357, 2873]. VIP [2959, 1655]. VIP-Tree [1655]. Viper [2607]. Viral [1291, 1164]. Virtual [3497, 1403, 3228, 4304, 366, 2305, 1924, 767, 2366, 367]. virtualization [892]. virtues [1017]. VisDPT [1583]. VISE [2186]. visibility [1679, 2148]. Vision [4267, 342, 1082]. VisQI [498]. Vista [2148]. Visual [3466, 3496, 3906, 3278, 3480, 4352, 3519, 1534, 1807, 746, 1583, 1405, 1181, 2490, 1407, 1980, 2181, 1790, 2753, 2547, 1666, 497, 1450, 3112, 736, 3102, 1587, 2641, 786]. visual-representative [497]. Visualization [3638, 3943, 4227, 3700, 3782, 4089, 2604, 2695, 2869, 2846, 3091, 2208, 332, 1071, 1811, 1683, 1401, 2862, 761, 1450, 1082, 1372]. Visualization-Assisted [4089]. Visualization-Aware [3700]. visualization-oriented [1071]. visualizations [1265, 1734, 1991, 1150]. visualize [2701]. visualizer [474]. Visualizing [3501, 1394, 2217, 138, 2200, 1029, 497, 3090, 2674]. visually [2547]. VisualNeo [3496]. Vita [1574]. Vive [4114]. Vizdom [1426]. VLDB [2471, 3526, 3525, 3522, 1187, 3139, 3940, 3933, 3939]. VLDBs [1975]. vocabulary [2297]. VOCAL [3488, 3371]. VOCALExplore [3531]. vocalization [1760]. Vocalizing [1951]. voice [1760, 2674, 2764]. voice-based [2764]. VOILA [2567, 3228]. Volatile [4178, 3275, 3543, 1775, 1876, 1263, 1288, 3063, 2548, 1078, 3182]. VolcanoML [2655]. Volume [3214, 3019, 1816]. volunteer [1193]. Voodoo [1627]. VoR [449]. VoR-tree [449]. Voronoi [2825, 449]. Vortex [4059]. Voting [4305]. Voyage [4351]. VQFT [3906]. VR [2354]. VRE [3067]. Vroom [1816]. vs [2924, 1009, 285, 1478, 1444, 2262, 3390]. VSAG [4287]. VStream [4083]. Vu [4208].

W3 [3922]. WADaR [1419]. Waffle [3482, 2989, 3215]. wait [1279]. Walk [3678, 1279, 3714, 1649, 609, 1706, 2932, 2527, 2642, 1629, 1036, 974]. Walk-Based [3714]. Walking [1454]. Walks [3289, 3388, 3191]. walls [2502]. WALTZ [3384]. Wanted [3696, 2037]. Warehouse [3832, 4296, 4297, 469, 109, 1702]. Warehouses [4277, 193, 3107]. warehousing [2759, 863, 1115, 319, 468, 323, 3034, 847, 123]. Warp [4325]. Warping [4233]. WarpLDA [1514]. wasm [3083]. Wasserstein [4234]. watching [1718]. Watermarks [2770]. wave [2774, 1506]. wavelet [581, 183, 49]. waves [2843]. way [418, 1803, 671]. Weak [3264, 4045, 3162, 4141, 2461, 1855, 2058, 2448]. Weak-to-Strong [4141]. Weakly [3601, 2071, 2715, 1779]. Weaver [1523]. web [1480, 1502, 846, 261, 743, 1644, 629, 1302, 2872, 260, 757, 1768, 649, 2705, 2725, 714, 2042, 3083, 940, 1754, 1101, 1147, 1558, 1916, 1106, 2470, 760, 2753, 1451, 2773, 1803, 665, 2332, 1639, 965, 558, 3069, 733, 1824, 3095, 801, 491, 123, 814, 297, 18, 1143, 329, 47, 45, 373, 551, 317, 266, 3238, 339, 198, 531, 219, 967, 167, 327, 197, 199, 126, 759, 46, 580, 391, 194, 3224, 816, 594, 949, 3922, 498, 1609, 787, 458, 3257, 101, 369, 523, 390, 328, 648, 298, 16, 3400, 525, 315, 135, 83, 3504, 1418, 17]. Web-based [1143, 167]. web-content [649]. Web-Pages [3400]. web-scale [2872, 1558, 2753, 2773, 2332, 1639, 733, 3224, 329, 369]. web-search [1106]. Web-site [327]. WebArrayDB [3095]. WebContent [123]. WebMILE [3119]. websites [1205]. WebTables [45, 2031]. WeChat [1773]. weight [620, 206, 224]. Weighted [3225, 3544, 4073, 11, 224, 424, 2419, 2527, 1057, 2652]. weights [2573]. Weld [1909]. welfare [2531]. Were [3696, 2037]. WeShap [4045]. WETSUIT [757]. What-Ifs [4036]. 'where [1949, 1219, 1535, 2387, 2629, 1629]. which [2433]. white [154]. Who [703, 680]. Whole

[3404, 419, 845, 1262]. **Whole-Query** [3404]. **Whom** [697]. **why-not** [1415, 1586, 1284, 2328]. **wi** [2727]. **wi-fi** [2727]. **WiClean** [2187]. **Wide** [3330, 3853, 3727, 1458, 315]. **wide-area** [1458]. **widely** [800]. **WideTable** [1083]. **wifi** [2509]. **Wikinegata** [2733]. **Wikipedia** [873, 2187, 2303, 583]. **Wikipedia-based** [873]. **wild** [2892, 2920, 2594, 1614]. **Will** [3416, 3522, 4321, 1437]. **Willingness** [1023]. **Win** [3772]. **Win-Win** [3772]. **Wind** [3953, 1069]. **Window** [3706, 3577, 3769, 3267, 3410, 3729, 4148, 676, 27, 1312, 2912, 655, 1281, 2126, 1501]. **Window-Based** [3769]. **windowed** [1554]. **Windowing** [4348]. **Windows** [3705, 2765]. **Winds** [2475]. **WindTunnel** [2807]. **wine** [507, 2955]. **wire** [399, 1609]. **wireless** [1766, 453]. **wires** [189]. **WiscSort** [3324]. **wise** [182, 52, 575, 49]. **WiSeDB** [1517]. **Wisely** [3425, 782]. **Wisteria** [1421]. **Witan** [2986]. **within** [2577, 3810, 2321, 3766]. **Without** [4144, 3245, 2796, 386, 3122, 3423, 1914, 2491, 259, 268, 2737]. **Witness** [3155, 492]. **Wolverine** [4133]. **WOLVES** [320]. **women** [2471, 3139]. **WOO** [872]. **word** [199]. **words** [353]. **Work** [1304, 4081, 3610, 483, 2327, 1689, 1835, 832]. **Work-efficient** [1304]. **workbench** [63]. **workbook** [3107]. **Worker** [1863, 1319, 1084]. **workers** [1309, 1697]. **Workflow** [3877, 601, 163, 326, 673, 1393, 3124, 320]. **workflow-based** [3124]. **Workflows** [3812, 3881, 3195, 2930, 1346, 293, 2862, 672, 422, 2730, 1104]. **Workload** [1075, 4103, 3867, 3215, 4188, 3232, 4295, 269, 3445, 3667, 4247, 4237, 4252, 1440, 1412, 2596, 406, 344, 2226, 2516, 2797, 1039, 2931, 3110, 1031, 1517, 2399, 2878, 2769, 2055, 1429]. **workload-adaptive** [2399]. **Workload-Aware** [3215, 269, 1031]. **Workload-Driven** [4237, 344, 2797]. **Workloads** [3337, 4077, 4279, 3221, 4185, 3558, 3597, 3280, 4283, 3808, 3826, 4152, 3698, 1785, 247, 1844, 2261, 1575, 2446, 3076, 727, 2758, 2958, 543, 2489, 1369, 2084, 2060, 2885, 307, 1762, 1282, 1880, 2525, 2788, 416, 1731, 1339, 3031, 1631, 1966, 2384, 850, 2449, 2739, 2278, 229, 2960, 1632, 856, 1510, 1702]. **works** [2471]. **workshop** [1187]. **World** [3640, 3281, 3505, 3938, 3852, 4113, 3595, 2574, 654, 1380, 1610, 680, 1043, 313, 2665, 217, 3177, 383, 1574, 2850, 2583, 1217]. **Worlds** [4294, 4375]. **Worst** [3378, 3517, 1886, 2346, 2398, 2164]. **Worst-Case** [3378, 3517, 1886, 2346, 2398, 2164]. **worthwhile** [1388]. **Wrangle** [3220]. **Wrangler** [4352]. **Wrangling** [3498]. **wrap** [1167]. **Wrapper** [3504, 1419]. **wrappers** [531]. **Write** [1656, 4154, 3825, 3802, 3626, 1037, 3418, 1263, 1679, 2102, 211, 840, 3028]. **Write-Ahead** [3825, 1263, 211]. **Write-Aware** [3418]. **write-back** [2102]. **Write-behind** [1656]. **Write-limited** [1037]. **Write-Optimized** [3626, 3028]. **Write-Specific** [4154]. **Writer** [314]. **wrong** [3]. **WYSIWYG** [17].

X [3670, 4212, 3846, 2007, 3392, 2319, 1178, 4240, 362]. **X-Blossom** [4212]. **X-LiSA** [1178]. **x-RDF-3X** [362]. **X-Stor** [3846]. **X-TED** [3670]. **XDB** [3513]. **XDBC** [4325]. **Xeon** [1276]. **xFraud** [2839]. **XGNN** [3627]. **XML** [118, 175, 421, 409, 281, 645, 668, 969, 41, 480, 26, 114, 512, 489, 76, 111, 149, 353, 978, 155, 168, 493, 115, 256, 40, 452, 283]. **XML-document-filtering** [168]. **XMorph** [480]. **XOR** [2549].

Xorbits [4184]. XORing [806]. XPath [195, 419, 523]. XPEDIA [281]. Xplus [442]. XQuery [282, 111, 116, 39]. XQuery/SQL/XML [111]. XSACT [490]. XSDs [763]. XTC [116]. XTCcmp [116]. XTreeNet [128].

YADING [1261]. Yahoo [104, 2252]. Yang [847]. Yannakakis [4144]. YASK [1586]. years [2031, 2847, 726]. yellow [386]. YeSQL [3122, 2981]. Yin [847]. YourSQL [1529]. Youtopia [186]. YouTube [2227]. Yugong [2238]. YZStack [1198].

ZaliQL [1812]. Zebra [3266]. Zen [2548]. zenvisage [1666]. Zero [3750, 2988, 3676, 3515, 3301, 4167, 3150, 3914, 3686, 3718, 2365]. Zero-Knowledge [3301, 3718]. Zero-Shot [3750, 3914, 2988]. Zero-Training [3676]. ZeroEA [3676]. Ziggy [1579]. ZINC [529]. ZIP [3545]. Ziv [594]. ZKSQL [3301]. ZNS [3384]. Zone [3384, 1764]. ZooBP [1680].

References

Hill:2008:TMO

[1] Mark D. Hill. Is transactional memory an oxymoron? *Proceedings of the VLDB Endowment*, 1(1):1, August 2008. CODEN ???? ISSN 2150-8097.

Zobel:2008:DSH

[2] Justin Zobel. Databases and the silification of health. *Proceedings of the VLDB Endowment*, 1(1):2, August 2008. CODEN ???? ISSN 2150-8097.

Blott:2008:WWH

[3] Stephen Blott and Roger Weber. What's wrong with high-dimensional similarity search? *Proceedings of the VLDB Endowment*, 1(1):3, August 2008. CODEN ???? ISSN 2150-8097.

Bruno:2008:CPD

[4] Nicolas Bruno and Surajit Chaudhuri. Constrained physical design tuning. *Proceedings of the VLDB Endowment*, 1(1):4–15, August 2008. CODEN ???? ISSN 2150-8097.

Kementsietsidis:2008:SMQ

[5] Anastasios Kementsietsidis, Frank Neven, Dieter Van de Craen, and Stijn Vansummeren. Scalable multi-query optimization for exploratory queries over federated scientific databases. *Proceedings of the VLDB Endowment*, 1(1):16–27, August 2008. CODEN ???? ISSN 2150-8097.

DeWitt:2008:CIC

[6] David J. DeWitt, Erik Paulson, Eric Robinson, Jeffrey Naughton, Joshua Royalty, Srinath Shankar, and Andrew Krioukov. Clustera: an integrated computation and data management system. *Proceedings of the VLDB Endowment*, 1(1):28–41, August 2008. CODEN ???? ISSN 2150-8097.

Cheung:2008:PPE

[7] Alvin Cheung and Samuel Madden. Performance profiling with EndoScope, an acquisitional software monitoring framework. *Proceedings of the VLDB Endowment*, 1(1):42–53, August 2008. CODEN ???? ISSN 2150-8097.

Bar-Yossef:2008:MSE

[8] Ziv Bar-Yossef and Maxim Gurevich. Mining search engine query logs via suggestion sampling. *Proceedings of the VLDB Endowment*, 1(1):54–65, August 2008. CODEN ???? ISSN 2150-8097.

Akdere:2008:PBC

[9] Mert Akdere, Uğur Çetintemel, and Nesime Tatbul. Plan-based complex event detection across distributed sources. *Proceedings of the VLDB Endowment*, 1(1):66–77, August 2008. CODEN ???? ISSN 2150-8097.

Lachmann:2008:FRP

[10] Alexander Lachmann and Mirek Riedewald. Finding relevant patterns in bursty sequences. *Proceedings of the VLDB Endowment*, 1(1):78–89, August 2008. CODEN ???? ISSN 2150-8097.

Cheng:2008:CLW

[11] Hao Cheng, Kien A. Hua, and Khanh Vu. Constrained locally weighted clustering. *Proceedings of the VLDB Endowment*, 1(1):90–101, August 2008. CODEN ???? ISSN 2150-8097.

Hay:2008:RSR

[12] Michael Hay, Gerome Miklau, David Jensen, Don Towsley, and Philipp Weis. Resisting structural re-identification in anonymized social networks. *Proceedings of the VLDB Endowment*, 1(1):102–114, August 2008. CODEN ???? ISSN 2150-8097.

Terrovitis:2008:PPA

[13] Manolis Terrovitis, Nikos Mamoulis, and Panos Kalnis. Privacy-preserving anonymization of set-valued data. *Proceedings of the VLDB Endowment*, 1 (1):115–125, August 2008. CODEN ???? ISSN 2150-8097.

Pang:2008:AQR

[14] HweeHwa Pang and Kyriakos Mouratidis. Authenticating the query results of text search engines. *Proceedings of the VLDB Endowment*, 1(1):126–137, August 2008. CODEN ???? ISSN 2150-8097.

Kundu:2008:SST

[15] Ashish Kundu and Elisa Bertino. Structural signatures for tree data structures. *Proceedings of the VLDB Endowment*, 1(1):138–150, August 2008. CODEN ???? ISSN 2150-8097.

Roitman:2008:MDC

[16] Haggai Roitman, David Carmel, and Elad Yom-Tov. Maintaining dynamic channel profiles on the Web. *Proceedings of the VLDB Endowment*, 1(1): 151–162, August 2008. CODEN ???? ISSN 2150-8097.

Yang:2008:WDD

[17] Fan Yang, Nitin Gupta, Chavdar Botev, Elizabeth F. Churchill, George Levchenko, and Jayavel Shanmugasundaram. WYSIWYG development of data driven Web applications. *Proceedings of the VLDB Endowment*, 1(1): 163–175, August 2008. CODEN ???? ISSN 2150-8097.

Baykan:2008:WPL

[18] Eda Baykan, Monika Henzinger, and Ingmar Weber. Web page language identification based on URLs. *Proceedings of the VLDB Endowment*, 1(1): 176–187, August 2008. CODEN ???? ISSN 2150-8097.

Han:2008:PQO

[19] Wook-Shin Han, Wooseong Kwak, Jinsoo Lee, Guy M. Lohman, and Volker Markl. Parallelizing query optimization. *Proceedings of the VLDB Endowment*, 1(1):188–200, August 2008. CODEN ???? ISSN 2150-8097.

Hadjieleftheriou:2008:HSS

[20] Marios Hadjieleftheriou, Xiaohui Yu, Nick Koudas, and Divesh Srivastava. Hashed samples: selectivity estimators for set similarity selection queries. *Proceedings of the VLDB Endowment*, 1 (1):201–212, August 2008. CODEN ???? ISSN 2150-8097.

Cohen:2008:TEU

[21] Edith Cohen and Haim Kaplan. Tighter estimation using bottom k sketches. *Proceedings of the VLDB Endowment*, 1(1):213–229, August 2008. CODEN ???? ISSN 2150-8097.

Alexe:2008:STB

[22] Bogdan Alexe, Wang-Chiew Tan, and Yannis Velegrakis. STBenchmark: towards a benchmark for mapping systems. *Proceedings of the VLDB Endowment*, 1(1):230–244, August 2008. CODEN ???? ISSN 2150-8097.

Katsis:2008:ISR

[23] Yannis Katsis, Alin Deutsch, and Yannis Papakonstantinou. Interactive source registration in community-oriented information integration. *Proceedings of the VLDB Endowment*, 1 (1):245–259, August 2008. CODEN ???? ISSN 2150-8097.

Hernandez:2008:DED

[24] Mauricio A. Hernández, Paolo Papotti, and Wang-Chiew Tan. Data exchange with data-metadata translations. *Proceedings of the VLDB Endowment*, 1 (1):260–273, August 2008. CODEN ???? ISSN 2150-8097.

Li:2008:OPN

[25] Jin Li, Kristin Tufte, Vladislav Shkapenyuk, Vassilis Papadimos, Theodore Johnson, and David Maier. Out-of-order processing: a new architecture for high-performance stream systems. *Proceedings of the VLDB Endowment*, 1(1):274–288, August 2008. CODEN ???? ISSN 2150-8097.

Han:2008:SET

[26] Wook-Shin Han, Haifeng Jiang, Howard Ho, and Quanzhong Li. StreamTX: extracting tuples from streaming XML data. *Proceedings of the VLDB Endowment*, 1(1):289–300, August 2008. CODEN ???? ISSN 2150-8097.

Jin:2008:SWT

[27] Cheqing Jin, Ke Yi, Lei Chen, Jeffrey Xu Yu, and Xuemin Lin. Sliding-window top-k queries on uncertain streams. *Proceedings of the VLDB Endowment*, 1(1):301–312, August 2008. CODEN ???? ISSN 2150-8097.

Koch:2008:CPD

[28] Christoph Koch and Dan Olteanu. Conditioning probabilistic databases. *Proceedings of the VLDB Endowment*, 1(1):313–325, August 2008. CODEN ???? ISSN 2150-8097.

Beskales:2008:EST

[29] George Beskales, Mohamed A. Soliman, and Ihab F. Ilyas. Efficient search for the top-k probable nearest neighbors in uncertain databases. *Proceedings of the VLDB Endowment*, 1(1): 326–339, August 2008. CODEN ???? ISSN 2150-8097.

Wang:2008:BML

[30] Daisy Zhe Wang, Eirinaios Michelakis, Minos Garofalakis, and Joseph M. Hellerstein. BayesStore: managing

large, uncertain data repositories with probabilistic graphical models. *Proceedings of the VLDB Endowment*, 1 (1):340–351, August 2008. CODEN ???? ISSN 2150-8097.

Deutch:2008:TIT

[31] Daniel Deutch and Tova Milo. Type inference and type checking for queries on execution traces. *Proceedings of the VLDB Endowment*, 1(1):352–363, August 2008. CODEN ???? ISSN 2150-8097.

Shang:2008:TVH

[32] Haichuan Shang, Ying Zhang, Xuemin Lin, and Jeffrey Xu Yu. Taming verification hardness: an efficient algorithm for testing subgraph isomorphism. *Proceedings of the VLDB Endowment*, 1 (1):364–375, August 2008. CODEN ???? ISSN 2150-8097.

Golab:2008:GNO

[33] Lukasz Golab, Howard Karloff, Flip Korn, Divesh Srivastava, and Bei Yu. On generating near-optimal tableaux for conditional functional dependencies. *Proceedings of the VLDB Endowment*, 1(1):376–390, August 2008. CODEN ???? ISSN 2150-8097.

Fan:2008:PFD

[34] Wenfei Fan, Shuai Ma, Yanli Hu, Jie Liu, and Yinghui Wu. Propagating functional dependencies with conditions. *Proceedings of the VLDB Endowment*, 1(1):391–407, August 2008. CODEN ???? ISSN 2150-8097.

Antonellis:2008:SQR

[35] Ioannis Antonellis, Hector Garcia Molina, and Chi Chao Chang. Simrank++: query rewriting through link analysis of the click graph. *Proceedings of the VLDB Endowment*, 1(1): 408–421, August 2008. CODEN ???? ISSN 2150-8097.

Lizorkin:2008:AEO

[36] Dmitry Lizorkin, Pavel Velikhov, Maxim Grinev, and Denis Turdakov. Accuracy estimate and optimization techniques for SimRank computation. *Proceedings of the VLDB Endowment*, 1(1):422–433, August 2008. CODEN ???? ISSN 2150-8097.

Chandramouli:2008:EES

[37] Badrish Chandramouli and Jun Yang. End-to-end support for joins in large-scale publish/subscribe systems. *Proceedings of the VLDB Endowment*, 1 (1):434–450, August 2008. CODEN ???? ISSN 2150-8097.

Machanavajjhala:2008:SRP

[38] Ashwin Machanavajjhala, Erik Vee, Minos Garofalakis, and Jayavel Shanmugasundaram. Scalable ranked publish/subscribe. *Proceedings of the VLDB Endowment*, 1(1):451–462, August 2008. CODEN ???? ISSN 2150-8097.

Teubner:2008:DCF

[39] Jens Teubner, Torsten Grust, Sebastian Maneth, and Sherif Sakr. Dependable cardinality forecasts for XQuery. *Proceedings of the VLDB Endowment*, 1(1):463–477, August 2008. CODEN ???? ISSN 2150-8097.

Wang:2008:HBS

[40] Hongzhi Wang, Jianzhong Li, Jizhou Luo, and Hong Gao. Hash-base subgraph query processing method for graph-structured XML documents.

Proceedings of the VLDB Endowment, 1(1):478–489, August 2008. CODEN ???? ISSN 2150-8097.

Cohen:2008:GXS

[41] Sara Cohen. Generating XML structure using examples and constraints. *Proceedings of the VLDB Endowment*, 1(1):490–501, August 2008. CODEN ???? ISSN 2150-8097.

Holloway:2008:ROD

[42] Allison L. Holloway and David J. DeWitt. Read-optimized databases, in depth. *Proceedings of the VLDB Endowment*, 1(1):502–513, August 2008. CODEN ???? ISSN 2150-8097.

Koltsidas:2008:FSL

[43] Ioannis Koltsidas and Stratis D. Viglas. Flashing up the storage layer. *Proceedings of the VLDB Endowment*, 1(1): 514–525, August 2008. CODEN ???? ISSN 2150-8097.

Sears:2008:RCL

[44] Russell Sears, Mark Callaghan, and Eric Brewer. Rose: compressed, log-structured replication. *Proceedings of the VLDB Endowment*, 1(1):526–537, August 2008. CODEN ???? ISSN 2150-8097.

Cafarella:2008:WEP

[45] Michael J. Cafarella, Alon Halevy, Daisy Zhe Wang, Eugene Wu, and Yang Zhang. WebTables: exploring the power of tables on the Web. *Proceedings of the VLDB Endowment*, 1(1): 538–549, August 2008. CODEN ???? ISSN 2150-8097.

Garrod:2008:SQR

[46] Charles Garrod, Amit Manjhi, Anastasia Ailamaki, Bruce Maggs, Todd Mowry, Christopher Olston, and Anthony Tomasic. Scalable query result caching for Web applications. *Proceedings of the VLDB Endowment*, 1(1): 550–561, August 2008. CODEN ???? ISSN 2150-8097.

Braga:2008:OMD

[47] Daniele Braga, Stefano Ceri, Florian Daniel, and Davide Martinenghi. Optimization of multi-domain queries on the Web. *Proceedings of the VLDB Endowment*, 1(1):562–573, August 2008. CODEN ???? ISSN 2150-8097.

Kwon:2008:FTS

[48] YongChul Kwon, Magdalena Balazinska, and Albert Greenberg. Fault-tolerant stream processing using a distributed, replicated file system. *Proceedings of the VLDB Endowment*, 1 (1):574–585, August 2008. CODEN ???? ISSN 2150-8097.

Yeh:2008:LLW

[49] Mi-Yen Yeh, Kun-Lung Wu, Philip S. Yu, and Ming-Syan Chen. LeeWave: level-wise distribution of wavelet coefficients for processing k NN queries over distributed streams. *Proceedings of the VLDB Endowment*, 1(1):586–597, August 2008. CODEN ???? ISSN 2150-8097.

Aguilera:2008:PSD

[50] Marcos K. Aguilera, Wojciech Golab, and Mehul A. Shah. A practical scalable distributed B-tree. *Proceedings of the VLDB Endowment*, 1(1):598–609, August 2008. CODEN ???? ISSN 2150-8097.

Qiao:2008:MMS

[51] Lin Qiao, Vijayshankar Raman, Frederick Reiss, Peter J. Haas, and Guy M.

Lohman. Main-memory scan sharing for multi-core CPUs. *Proceedings of the VLDB Endowment*, 1(1):610–621, August 2008. CODEN ???? ISSN 2150-8097.

Johnson:2008:RWP

[52] Ryan Johnson, Vijayshankar Raman, Richard Sidle, and Garret Swart. Row-wise parallel predicate evaluation. *Proceedings of the VLDB Endowment*, 1 (1):622–634, August 2008. CODEN ???? ISSN 2150-8097.

Soundararajan:2008:DPC

[53] Gokul Soundararajan, Jin Chen, Mohamed A. Sharaf, and Cristiana Amza. Dynamic partitioning of the cache hierarchy in shared data centers. *Proceedings of the VLDB Endowment*, 1(1): 635–646, August 2008. CODEN ???? ISSN 2150-8097.

Neumann:2008:RRS

[54] Thomas Neumann and Gerhard Weikum. RDF-3X: a RISC-style engine for RDF. *Proceedings of the VLDB Endowment*, 1(1):647–659, August 2008. CODEN ???? ISSN 2150-8097.

Simitsis:2008:MCE

[55] Alkis Simitsis, Akanksha Baid, Yannis Sismanis, and Berthold Reinwald. Multidimensional content eXploration. *Proceedings of the VLDB Endowment*, 1(1):660–671, August 2008. CODEN ???? ISSN 2150-8097.

Fontoura:2008:RTS

[56] Marcus Fontoura, Vanja Josifovski, Ravi Kumar, Christopher Olston, Andrew Tomkins, and Sergei Vassilvitskii. Relaxation in text search using taxonomies. *Proceedings of the VLDB Endowment*, 1(1):672–683, August 2008. CODEN ???? ISSN 2150-8097.

Nguyen:2008:LEF

[57] Hoa Nguyen, Thanh Nguyen, and Juliana Freire. Learning to extract form labels. *Proceedings of the VLDB Endowment*, 1(1):684–694, August 2008. CODEN ???? ISSN 2150-8097.

Jayapandian:2008:ACF

[58] Magesh Jayapandian and H. V. Jagadish. Automated creation of a forms-based database query interface. *Proceedings of the VLDB Endowment*, 1 (1):695–709, August 2008. CODEN ???? ISSN 2150-8097.

Yahia:2008:ENA

[59] Sihem Amer Yahia, Michael Benedikt, Laks V. S. Lakshmanan, and Julia Stoyanovich. Efficient network aware search in collaborative tagging sites. *Proceedings of the VLDB Endowment*, 1(1):710–721, August 2008. CODEN ???? ISSN 2150-8097.

Cheng:2008:CUD

[60] Reynold Cheng, Jinchuan Chen, and Xike Xie. Cleaning uncertain data with quality guarantees. *Proceedings of the VLDB Endowment*, 1(1):722–735, August 2008. CODEN ???? ISSN 2150-8097.

Huang:2008:PNA

[61] Jiansheng Huang, Ting Chen, AnHai Doan, and Jeffrey F. Naughton. On the provenance of non-answers to queries over extracted data. *Proceedings of the VLDB Endowment*, 1(1):736–747, August 2008. CODEN ???? ISSN 2150-8097.

Zhu:2008:DAP

[62] Shenghuo Zhu, Tao Li, Zhiyuan Chen, Dingding Wang, and Yihong Gong. Dynamic active probing of helpdesk databases. *Proceedings of the VLDB Endowment*, 1(1):748–760, August 2008. CODEN ???? ISSN 2150-8097.

Curino:2008:GDS

[63] Carlo A. Curino, Hyun J. Moon, and Carlo Zaniolo. Graceful database schema evolution: the PRISM workbench. *Proceedings of the VLDB Endowment*, 1(1):761–772, August 2008. CODEN ???? ISSN 2150-8097.

Chai:2008:ARD

[64] Xiaoyong Chai, Mayssam Sayyadian, AnHai Doan, Arnon Rosenthal, and Len Seligman. Analyzing and revising data integration schemas to improve their matchability. *Proceedings of the VLDB Endowment*, 1(1):773–784, August 2008. CODEN ???? ISSN 2150-8097.

Talukdar:2008:LCD

[65] Partha Pratim Talukdar, Marie Jacob, Muhammad Salman Mehmood, Koby Crammer, Zachary G. Ives, Fernando Pereira, and Sudipto Guha. Learning to create data-integrating queries. *Proceedings of the VLDB Endowment*, 1(1):785–796, August 2008. CODEN ???? ISSN 2150-8097.

Re:2008:ALP

[66] Christopher Ré and Dan Suciu. Approximate lineage for probabilistic databases. *Proceedings of the VLDB Endowment*, 1(1):797–808, August 2008. CODEN ???? ISSN 2150-8097.

Sen:2008:ESC

[67] Prithviraj Sen, Amol Deshpande, and Lise Getoor. Exploiting shared correlations in probabilistic databases. *Proceedings of the VLDB Endowment*, 1 (1):809–820, August 2008. CODEN ???? ISSN 2150-8097.

Rastogi:2008:ACU

[68] Vibhor Rastogi, Dan Suciu, and Evan Welbourne. Access control over uncertain data. *Proceedings of the VLDB Endowment*, 1(1):821–832, August 2008. CODEN ???? ISSN 2150-8097.

Cormode:2008:ABG

[69] Graham Cormode, Divesh Srivastava, Ting Yu, and Qing Zhang. Anonymizing bipartite graph data using safe groupings. *Proceedings of the VLDB Endowment*, 1(1):833–844, August 2008. CODEN ???? ISSN 2150-8097.

Bu:2008:PPS

[70] Yingyi Bu, Ada Wai Chee Fu, Raymond Chi Wing Wong, Lei Chen, and Jiuyong Li. Privacy preserving serial data publishing by role composition. *Proceedings of the VLDB Endowment*, 1(1):845–856, August 2008. CODEN ???? ISSN 2150-8097.

Xiao:2008:OPQ

[71] Xiaokui Xiao and Yufei Tao. Output perturbation with query relaxation. *Proceedings of the VLDB Endowment*, 1(1):857–869, August 2008. CODEN ???? ISSN 2150-8097.

Lomet:2008:TTI

[72] David Lomet, Mingsheng Hong, Rimma Nehme, and Rui Zhang. Trans-

action time indexing with version compression. *Proceedings of the VLDB Endowment*, 1(1):870–881, August 2008. CODEN ???? ISSN 2150-8097.

Moon:2008:MQT

[73] Hyun J. Moon, Carlo A. Curino, Alin Deutsch, Chien-Yi Hou, and Carlo Zaniolo. Managing and querying transaction-time databases under schema evolution. *Proceedings of the VLDB Endowment*, 1(1):882–895, August 2008. CODEN ???? ISSN 2150-8097.

Sherkat:2008:EST

[74] Reza Sherkat and Davood Rafiei. On efficiently searching trajectories and archival data for historical similarities. *Proceedings of the VLDB Endowment*, 1(1):896–908, August 2008. CODEN ???? ISSN 2150-8097.

Pu:2008:KQC

[75] Ken Q. Pu and Xiaohui Yu. Keyword query cleaning. *Proceedings of the VLDB Endowment*, 1(1):909–920, August 2008. CODEN ???? ISSN 2150-8097.

Liu:2008:RIR

[76] Ziyang Liu and Yi Cher. Reasoning and identifying relevant matches for XML keyword search. *Proceedings of the VLDB Endowment*, 1(1):921–932, August 2008. CODEN ???? ISSN 2150-8097.

Xiao:2008:EJE

[77] Chuan Xiao, Wei Wang, and Xuemin Lin. Ed-Join: an efficient algorithm for similarity joins with edit distance constraints. *Proceedings of the VLDB Endowment*, 1(1):933–944, August 2008. CODEN ???? ISSN 2150-8097.

Agrawal:2008:SAH

[78] Sanjay Agrawal, Kaushik Chakrabarti, Surajit Chaudhuri, and Venkatesh Ganti. Scalable ad-hoc entity extraction from text collections. *Proceedings of the VLDB Endowment*, 1(1):945–957, August 2008. CODEN ???? ISSN 2150-8097.

Agrawal:2008:SSS

[79] Parag Agrawal, Daniel Kifer, and Christopher Olston. Scheduling shared scans of large data files. *Proceedings of the VLDB Endowment*, 1(1):958–969, August 2008. CODEN ???? ISSN 2150-8097.

Nath:2008:OMV

[80] Suman Nath and Phillip B. Gibbons. Online maintenance of very large random samples on flash storage. *Proceedings of the VLDB Endowment*, 1(1):970–983, August 2008. CODEN ???? ISSN 2150-8097.

Ge:2008:SLA

[81] Tingjian Ge and Stan Zdonik. A skip-list approach for efficiently processing forecasting queries. *Proceedings of the VLDB Endowment*, 1(1):984–995, August 2008. CODEN ???? ISSN 2150-8097.

Phan:2008:RRF

[82] Thomas Phan and Wen-Syan Li. A request-routing framework for SOA-based enterprise computing. *Proceedings of the VLDB Endowment*, 1(1):996–1007, August 2008. CODEN ???? ISSN 2150-8097.

Weiss:2008:HSI

[83] Cathrin Weiss, Panagiotis Karras, and Abraham Bernstein. Hexastore: sex-

tuple indexing for Semantic Web data management. *Proceedings of the VLDB Endowment*, 1(1):1008–1019, August 2008. CODEN ???? ISSN 2150-8097.

Shahabi:2008:ILS

[84] Cyrus Shahabi, Lu-An Tang, and Songhua Xing. Indexing land surface for efficient kNN query. *Proceedings of the VLDB Endowment*, 1(1):1020–1031, August 2008. CODEN ???? ISSN 2150-8097.

Wong:2008:ESQ

[85] Raymond Chi-Wing Wong, Ada Wai-Chee Fu, Jian Pei, Yip Sing Ho, Tai Wong, and Yubao Liu. Efficient skyline querying with variable user preferences on nominal attributes. *Proceedings of the VLDB Endowment*, 1(1): 1032–1043, August 2008. CODEN ???? ISSN 2150-8097.

Guo:2008:ETP

[86] Lin Guo, Sihem Amer Yahia, Raghu Ramakrishnan, Jayavel Shanmugasundaram, Utkarsh Srivastava, and Erik Vee. Efficient top-k processing over query-dependent functions. *Proceedings of the VLDB Endowment*, 1(1): 1044–1055, August 2008. CODEN ???? ISSN 2150-8097.

Wu:2008:FER

[87] Wei Wu, Fei Yang, Chee-Yong Chan, and Kian-Lee Tan. FINCH: evaluating reverse k-nearest-neighbor queries on location data. *Proceedings of the VLDB Endowment*, 1(1):1056–1067, August 2008. CODEN ???? ISSN 2150-8097.

Jeung:2008:DCT

[88] Hoyoung Jeung, Man Lung Yiu, Xiaofang Zhou, Christian S. Jensen, and Heng Tao Shen. Discovery of convoys in trajectory databases. *Proceedings of the VLDB Endowment*, 1(1):1068–1080, August 2008. CODEN ???? ISSN 2150-8097.

Lee:2008:TTC

[89] Jae-Gil Lee, Jiawei Han, Xiaolei Li, and Hector Gonzalez. TraClass: trajectory classification using hierarchical region-based and trajectory-based clustering. *Proceedings of the VLDB Endowment*, 1(1):1081–1094, August 2008. CODEN ???? ISSN 2150-8097.

Nutanong:2008:VDQ

[90] Sarana Nutanong, Rui Zhang, Egemen Tanin, and Lars Kulik. The V*-Diagram: a query-dependent approach to moving KNN queries. *Proceedings of the VLDB Endowment*, 1(1):1095–1106, August 2008. CODEN ???? ISSN 2150-8097.

Guravannavar:2008:RPB

[91] Ravindra Guravannavar and S. Sudarshan. Rewriting procedures for batched bindings. *Proceedings of the VLDB Endowment*, 1(1):1107–1123, August 2008. CODEN ???? ISSN 2150-8097.

D:2008:IRP

[92] Harish D., Pooja N. Darera, and Jayant R. Haritsa. Identifying robust plans through plan diagram reduction. *Proceedings of the VLDB Endowment*, 1(1):1124–1140, August 2008. CODEN ???? ISSN 2150-8097.

Chaudhuri:2008:PYG

[93] Surajit Chaudhuri, Vivek Narasayya, and Ravi Ramamurthy. A pay-as-you-go framework for query execution feedback. *Proceedings of the VLDB Endow-*

ment, 1(1):1141–1152, August 2008. CODEN ???? ISSN 2150-8097.

Condie:2008:ERM

[94] Tyson Condie, David Chu, Joseph M. Hellerstein, and Petros Maniatis. Evita raced: metacompilation for declarative networks. *Proceedings of the VLDB Endowment*, 1(1):1153–1165, August 2008. CODEN ???? ISSN 2150-8097.

Chiang:2008:DDQ

[95] Fei Chiang and Renée J. Miller. Discovering data quality rules. *Proceedings of the VLDB Endowment*, 1(1):1166–1177, August 2008. CODEN ???? ISSN 2150-8097.

Zhang:2008:MNR

[96] Xiang Zhang, Feng Pan, Wei Wang, and Andrew Nobel. Mining nonredundant high order correlations in binary data. *Proceedings of the VLDB Endowment*, 1(1):1178–1188, August 2008. CODEN ???? ISSN 2150-8097.

Dalvi:2008:KSE

[97] Bhavana Bharat Dalvi, Meghana Kshirsagar, and S. Sudarshan. Keyword search on external memory data graphs. *Proceedings of the VLDB Endowment*, 1(1):1189–1204, August 2008. CODEN ???? ISSN 2150-8097.

Koltsidas:2008:SHD

[98] Ioannis Koltsidas, Heiko Müller, and Stratis D. Viglas. Sorting hierarchical data in external memory for archiving. *Proceedings of the VLDB Endowment*, 1(1):1205–1216, August 2008. CODEN ???? ISSN 2150-8097.

Metwally:2008:SSP

[99] Ahmed Metwally, Fatih Emekçi, Divyakant Agrawal, and Amr El Abbadi. SLEUTH: Single-pubLisher attack dEtection Using correlaTion Hunting. *Proceedings of the VLDB Endowment*, 1(2):1217–1228, August 2008. CODEN ???? ISSN 2150-8097.

Poess:2008:ECK

[100] Meikel Poess and Raghunath Othayoth Nambiar. Energy cost, the key challenge of today's data centers: a power consumption analysis of TPC-C results. *Proceedings of the VLDB Endowment*, 1(2):1229–1240, August 2008. CODEN ???? ISSN 2150-8097.

Madhavan:2008:GDW

[101] Jayant Madhavan, David Ko, Lucja Kot, Vignesh Ganapathy, Alex Rasmussen, and Alon Halevy. Google's Deep Web crawl. *Proceedings of the VLDB Endowment*, 1(2):1241–1252, August 2008. CODEN ???? ISSN 2150-8097.

Weis:2008:ISD

[102] Melanie Weis, Felix Naumann, Ulrich Jehle, Jens Lufter, and Holger Schuster. Industry-scale duplicate detection. *Proceedings of the VLDB Endowment*, 1(2):1253–1264, August 2008. CODEN ???? ISSN 2150-8097.

Chaiken:2008:SEE

[103] Ronnie Chaiken, Bob Jenkins, Per-Åke Larson, Bill Ramsey, Darren Shakib, Simon Weaver, and Jingren Zhou. SCOPE: easy and efficient parallel processing of massive data sets. *Proceedings of the VLDB Endowment*, 1(2):1265–1276, August 2008. CODEN ???? ISSN 2150-8097.

Cooper:2008:PYH

[104] Brian F. Cooper, Raghu Ramakrishnan, Utkarsh Srivastava, Adam Silberstein, Philip Bohannon, Hans-Arno Jacobsen, Nick Puz, Daniel Weaver, and Ramana Yerneni. PNUTS: Yahoo!'s hosted data serving platform. *Proceedings of the VLDB Endowment*, 1(2): 1277–1288, August 2008. CODEN ???? ISSN 2150-8097.

Acharya:2008:RSF

[105] Srini Acharya, Peter Carlin, Cesar Galindo-Legaria, Krzysztof Kozielczyk, Pawel Terlecki, and Peter Zabback. Relational support for flexible schema scenarios. *Proceedings of the VLDB Endowment*, 1(2):1289–1300, August 2008. CODEN ???? ISSN 2150-8097.

Mukherjee:2008:OSS

[106] Niloy Mukherjee, Bharath Aleti, Amit Ganesh, Krishna Kunchithapadam, Scott Lynn, Sujatha Muthulingam, Kam Shergill, Shaoyu Wang, and Wei Zhang. Oracle SecureFiles System. *Proceedings of the VLDB Endowment*, 1(2):1301–1312, August 2008. CODEN ???? ISSN 2150-8097.

Chhugani:2008:EIS

[107] Jatin Chhugani, Anthony D. Nguyen, Victor W. Lee, William Macy, Mostafa Hagog, Yen-Kuang Chen, Akram Baransi, Sanjeev Kumar, and Pradeep Dubey. Efficient implementation of sorting on multi-core SIMD CPU architecture. *Proceedings of the VLDB Endowment*, 1(2):1313–1324, August 2008. CODEN ???? ISSN 2150-8097.

Dey:2008:EAQ

[108] Atreyee Dey, Sourjya Bhaumik, Harish D., and Jayant R. Haritsa. Efficiently approximating query optimizer plan diagrams. *Proceedings of the VLDB Endowment*, 1(2):1325–1336, August 2008. CODEN ???? ISSN 2150-8097.

Slezak:2008:BAD

[109] Dominik Ślezak, Jakub Wróblewski, Victoria Eastwood, and Piotr Synak. Brighthouse: an analytic data warehouse for ad-hoc queries. *Proceedings of the VLDB Endowment*, 1(2):1337–1345, August 2008. CODEN ???? ISSN 2150-8097.

Ziauddin:2008:OPC

[110] Mohamed Ziauddin, Dinesh Das, Hong Su, Yali Zhu, and Khaled Yagoub. Optimizer plan change management: improved stability and performance in Oracle 11g. *Proceedings of the VLDB Endowment*, 1(2):1346–1355, August 2008. CODEN ???? ISSN 2150-8097.

Liu:2008:TPX

[111] Zhen Hua Liu, Sivasankaran Chandrasekar, Thomas Baby, and Hui J. Chang. Towards a physical XML independent XQuery/SQL/XML engine. *Proceedings of the VLDB Endowment*, 1(2):1356–1367, August 2008. CODEN ???? ISSN 2150-8097.

Lee:2008:CQP

[112] Allison W. Lee and Mohamed Zait. Closing the query processing loop in Oracle 11g. *Proceedings of the VLDB Endowment*, 1(2):1368–1378, August 2008. CODEN ???? ISSN 2150-8097.

Jain:2008:TSS

[113] Namit Jain, Shailendra Mishra, Anand Srinivasan, Johannes Gehrke, Jennifer Widom, Hari Balakrishnan, Uğur Çetintemel, Mitch Cherniack, Richard

Tibbetts, and Stan Zdonik. Towards a streaming SQL standard. *Proceedings of the VLDB Endowment*, 1(2):1379–1390, August 2008. CODEN ???? ISSN 2150-8097.

Huang:2008:ESG

[114] Yu Huang, Ziyang Liu, and Yi Chen. eXtract: a snippet generation system for XML search. *Proceedings of the VLDB Endowment*, 1(2):1392–1395, August 2008. CODEN ???? ISSN 2150-8097.

Terwilliger:2008:LIQ

[115] James F. Terwilliger, Sergey Melnik, and Philip A. Bernstein. Language-integrated querying of XML data in SQL server. *Proceedings of the VLDB Endowment*, 1(2):1396–1399, August 2008. CODEN ???? ISSN 2150-8097.

Mathis:2008:XXC

[116] Christian Mathis, Andreas M. Weiner, Theo Härder, and Caesar Ralf Franz Hoppen. XTCcmp: XQuery compilation on XTC. *Proceedings of the VLDB Endowment*, 1(2):1400–1403, August 2008. CODEN ???? ISSN 2150-8097.

Tian:2008:PGG

[117] Yuanyuan Tian, Jignesh M. Patel, Viji Nair, Sebastian Martini, and Matthias Kretzler. Periscope/GQ: a graph querying toolkit. *Proceedings of the VLDB Endowment*, 1(2):1404–1407, August 2008. CODEN ???? ISSN 2150-8097.

Balmin:2008:SSS

[118] Andrey Balmin, Latha Colby, Emiran Curtmola, Quanzhong Li, Fatma Özcan, Sharath Srinivas, and Zografoula Vagena. SEDA: a system for search, exploration, discovery, and analysis of XML Data. *Proceedings of the VLDB Endowment*, 1(2):1408–1411, August 2008. CODEN ???? ISSN 2150-8097.

Motahari:2008:PSD

[119] Hamid Motahari, Boualem Benatallah, Regis Saint-Paul, Fabio Casati, and Periklis Andritsos. Process spaceship: discovering and exploring process views from event logs in data spaces. *Proceedings of the VLDB Endowment*, 1 (2):1412–1415, August 2008. CODEN ???? ISSN 2150-8097.

Lupu:2008:PPP

[120] Mihai Lupu and Y. C. Tay. P 3 N: profiling the potential of a peer-based data management system. *Proceedings of the VLDB Endowment*, 1(2):1416–1419, August 2008. CODEN ???? ISSN 2150-8097.

Tlili:2008:PLT

[121] Mounir Tlili, W. Kokou Dedzoe, Esther Pacitti, Patrick Valduriez, Reza Akbarinia, Pascal Molli, Gérôme Canals, and Stéphane Laurière. P2P logging and timestamping for reconciliation. *Proceedings of the VLDB Endowment*, 1(2):1420–1423, August 2008. CODEN ???? ISSN 2150-8097.

Luu:2008:ASP

[122] Toan Luu, Gleb Skobeltsyn, Fabius Klemm, Maroje Puh, Ivana Podnar Zarko, Martin Rajman, and Karl Aberer. AlvisP2P: scalable peer-to-peer text retrieval in a structured P2P network. *Proceedings of the VLDB Endowment*, 1(2):1424–1427, August 2008. CODEN ???? ISSN 2150-8097.

Abiteboul:2008:WEP

[123] S. Abiteboul, T. Allard, P. Chatalic, G. Gardarin, A. Ghitescu, F. Goasdoué, I. Manolescu, B. Nguyen, M. Ouazara, A. Somani, N. Travers, G. Vasile, and S. Zoupanos. WebContent: efficient P2P Warehousing of Web data. *Proceedings of the VLDB Endowment*, 1(2):1428–1431, August 2008. CODEN ???? ISSN 2150-8097.

Jurczyk:2008:DED

[124] Pawel Jurczyk and Li Xiong. DObjects: enabling distributed data services for metacomputing platforms. *Proceedings of the VLDB Endowment*, 1(2):1432–1435, August 2008. CODEN ???? ISSN 2150-8097.

Shao:2008:ETR

[125] Qihong Shao, Yi Chen, Shu Tao, Xifeng Yan, and Nikos Anerousis. EasyTicket: a ticket routing recommendation engine for enterprise problem resolution. *Proceedings of the VLDB Endowment*, 1(2):1436–1439, August 2008. CODEN ???? ISSN 2150-8097.

Duda:2008:ACI

[126] Cristian Duda, Gianni Frey, Donald Kossmann, and Chong Zhou. AJAXSearch: crawling, indexing and searching Web 2.0 applications. *Proceedings of the VLDB Endowment*, 1 (2):1440–1443, August 2008. CODEN ???? ISSN 2150-8097.

Liu:2008:MSH

[127] Kun Liu, Evimaria Terzi, and Tyrone Grandison. ManyAspects: a system for highlighting diverse concepts in documents. *Proceedings of the VLDB Endowment*, 1(2):1444–1447, August 2008. CODEN ???? ISSN 2150-8097.

Curtmola:2008:XDC

[128] Emiran Curtmola, Alin Deutsch, Dionysios Logothetis, K. K. Ramakrishnan, Divesh Srivastava, and Kenneth Yocum. XTreeNet: democratic community search. *Proceedings of the VLDB Endowment*, 1(2):1448–1451, August 2008. CODEN ???? ISSN 2150-8097.

Li:2008:EVK

[129] Guoliang Li, Jianhua Feng, Jianyong Wang, and Lizhu Zhou. An effective and versatile keyword search engine on heterogeneous data sources. *Proceedings of the VLDB Endowment*, 1(2): 1452–1455, August 2008. CODEN ???? ISSN 2150-8097.

Baid:2008:DME

[130] Akanksha Baid, Andrey Balmin, Heasoo Hwang, Erik Nijkamp, Jun Rao, Berthold Reinwald, Alkis Simitsis, Yannis Sismanis, and Frank van Ham. DBPubs: multidimensional exploration of database publications. *Proceedings of the VLDB Endowment*, 1 (2):1456–1459, August 2008. CODEN ???? ISSN 2150-8097.

Fan:2008:SDQ

[131] Wenfei Fan, Floris Geerts, and Xibei Jia. Semandaq: a data quality system based on conditional functional dependencies. *Proceedings of the VLDB Endowment*, 1(2):1460–1463, August 2008. CODEN ???? ISSN 2150-8097.

Katsis:2008:RTI

[132] Yannis Katsis, Alin Deutsch, Yannis Papakonstantinou, and Keliang Zhao. RIDE: a tool for interactive source registration in community-oriented information integration. *Proceedings*

of the VLDB Endowment, 1(2):1464–1467, August 2008. CODEN ???? ISSN 2150-8097.

Alexe:2008:CEM

[133] Bogdan Alexe, Wang-Chiew Tan, and Yannis Velegrakis. Comparing and evaluating mapping systems with STBenchmark. *Proceedings of the VLDB Endowment*, 1(2):1468–1471, August 2008. CODEN ???? ISSN 2150-8097.

Logothetis:2008:AHD

[134] Dionysios Logothetis and Kenneth Yocum. Ad-hoc data processing in the cloud. *Proceedings of the VLDB Endowment*, 1(2):1472–1475, August 2008. CODEN ???? ISSN 2150-8097.

Weigel:2008:LSC

[135] Felix Weigel, Biswanath Panda, Mirek Riedewald, Johannes Gehrke, and Manuel Calimlim. Large-scale collaborative analysis and extraction of Web data. *Proceedings of the VLDB Endowment*, 1(2):1476–1479, August 2008. CODEN ???? ISSN 2150-8097.

Crecelius:2008:MSS

[136] Tom Crecelius, Mouna Kacimi, Sebastian Michel, Thomas Neumann, Josiane Xavier Parreira, Ralf Schenkel, and Gerhard Weikum. Making SENSE: socially enhanced search and exploration. *Proceedings of the VLDB Endowment*, 1(2):1480–1483, August 2008. CODEN ???? ISSN 2150-8097.

Lu:2008:ASD

[137] Wentian Lu and Gerome Miklau. AuditGuard: a system for database auditing under retention restrictions. *Proceedings of the VLDB Endowment*, 1 (2):1484–1487, August 2008. CODEN ???? ISSN 2150-8097.

Hu:2008:QVQ

[138] Ling Hu, Kenneth A. Ross, Yuan-Chi Chang, Christian A. Lang, and Donghui Zhang. QueryScope: visualizing queries for repeatable database tuning. *Proceedings of the VLDB Endowment*, 1(2):1488–1491, August 2008. CODEN ???? ISSN 2150-8097.

Hose:2008:WIT

[139] Katja Hose, Daniel Klan, Matthias Marx, and Kai-Uwe Sattler. When is it time to rethink the aggregate configuration of your OLAP server? *Proceedings of the VLDB Endowment*, 1 (2):1492–1495, August 2008. CODEN ???? ISSN 2150-8097.

Kallman:2008:HSH

[140] Robert Kallman, Hideaki Kimura, Jonathan Natkins, Andrew Pavlo, Alexander Rasin, Stanley Zdonik, Evan P. C. Jones, Samuel Madden, Michael Stonebraker, Yang Zhang, John Hugg, and Daniel J. Abadi. H-store: a high-performance, distributed main memory transaction processing system. *Proceedings of the VLDB Endowment*, 1 (2):1496–1499, August 2008. CODEN ???? ISSN 2150-8097.

Perlman:2008:OIN

[141] Eric Perlman, Randal Burns, and Michael Kazhdan. Organizing and indexing non-convex regions. *Proceedings of the VLDB Endowment*, 1(2):1500–1503, August 2008. CODEN ???? ISSN 2150-8097.

Paquet:2008:CME

[142] Eric Paquet and Herna L. Viktor. Capri/MR: exploring protein databases

from a structural and physicochemical point of view. *Proceedings of the VLDB Endowment*, 1(2):1504–1507, August 2008. CODEN ???? ISSN 2150-8097.

Guo:2008:CMM

[143] Fan Guo, Lei Li, Christos Faloutsos, and Eric P. Xing. C-DEM: a multimodal query system for Drosophila Embryo databases. *Proceedings of the VLDB Endowment*, 1(2):1508–1511, August 2008. CODEN ???? ISSN 2150-8097.

Milo:2008:QMD

[144] Tova Milo and Daniel Deutch. Querying and monitoring distributed business processes. *Proceedings of the VLDB Endowment*, 1(2):1512–1515, August 2008. CODEN ???? ISSN 2150-8097.

Franklin:2008:FTD

[145] Michael Franklin, Alon Halevy, and David Maier. A first tutorial on dataspaces. *Proceedings of the VLDB Endowment*, 1(2):1516–1517, August 2008. CODEN ???? ISSN 2150-8097.

Franconi:2008:ODM

[146] Enrico Franconi. Ontologies and databases: myths and challenges. *Proceedings of the VLDB Endowment*, 1 (2):1518–1519, August 2008. CODEN ???? ISSN 2150-8097.

Balazinska:2008:SAP

[147] Magdalena Balazinska, Christopher Ré, and Dan Suciu. Systems aspects of probabilistic data management. *Proceedings of the VLDB Endowment*, 1 (2):1520–1521, August 2008. CODEN ???? ISSN 2150-8097.

Fan:2008:RIC

[148] Wenfei Fan, Floris Geerts, and Xibei Jia. A revival of integrity constraints for data cleaning. *Proceedings of the VLDB Endowment*, 1(2):1522–1523, August 2008. CODEN ???? ISSN 2150-8097.

Moro:2008:XSS

[149] Mirella M. Moro, Zografoula Vagena, and Vassilis J. Tsotras. XML Structural Summaries. *Proceedings of the VLDB Endowment*, 1(2):1524–1525, August 2008. CODEN ???? ISSN 2150-8097.

Sharaf:2008:SCQ

[150] Mohamed A. Sharaf, Alexandros Labrinidis, and Panos K. Chrysanthis. Scheduling continuous queries in data stream management systems. *Proceedings of the VLDB Endowment*, 1(2): 1526–1527, August 2008. CODEN ???? ISSN 2150-8097.

Kriegel:2008:DCM

[151] Hans-Peter Kriegel, Peer Kröger, and Arthur Zimek. Detecting clusters in moderate-to-high dimensional data: subspace clustering, pattern-based clustering, and correlation clustering. *Proceedings of the VLDB Endowment*, 1(2):1528–1529, August 2008. CODEN ???? ISSN 2150-8097.

Cormode:2008:FFI

[152] Graham Cormode and Marios Hadjieleftheriou. Finding frequent items in data streams. *Proceedings of the VLDB Endowment*, 1(2):1530–1541, August 2008. CODEN ???? ISSN 2150-8097.

Ding:2008:QMT

[153] Hui Ding, Goce Trajcevski, Peter Scheuermann, Xiaoyue Wang, and Eamonn Keogh. Querying and mining of time series data: experimental comparison of representations and distance measures. *Proceedings of the VLDB Endowment*, 1(2):1542–1552, August 2008. CODEN ???? ISSN 2150-8097.

Sidirourgos:2008:CSS

[154] Lefteris Sidirourgos, Romulo Goncalves, Martin Kersten, Niels Nes, and Stefan Manegold. Column-store support for RDF data management: not all swans are white. *Proceedings of the VLDB Endowment*, 1(2):1553–1563, August 2008. CODEN ???? ISSN 2150-8097.

Sans:2008:PBN

[155] Virginie Sans and Dominique Laurent. Prefix based numbering schemes for XML: techniques, applications and performances. *Proceedings of the VLDB Endowment*, 1(2):1564–1573, August 2008. CODEN ???? ISSN 2150-8097.

Chen:2008:BEM

[156] Su Chen, Christian S. Jensen, and Dan Lin. A benchmark for evaluating moving object indexes. *Proceedings of the VLDB Endowment*, 1(2):1574–1585, August 2008. CODEN ???? ISSN 2150-8097.

Dittrich:2008:DRM

[157] Jens Dittrich, Lukas Blunschi, and Marcos Antonio Vaz Salles. Dwarfs in the rearview mirror: how big are they really? *Proceedings of the VLDB Endowment*, 1(2):1586–1597, August 2008. CODEN ???? ISSN 2150-8097.

Shao:2008:CTE

[158] Jie Shao, Heng Tao Shen, and Xiaofang Zhou. Challenges and techniques for effective and efficient similarity search in large video databases. *Proceedings of the VLDB Endowment*, 1(2):1598–1603, August 2008. CODEN ???? ISSN 2150-8097.

Hopfgartner:2008:SIM

[159] Frank Hopfgartner. Studying interaction methodologies in video retrieval. *Proceedings of the VLDB Endowment*, 1(2):1604–1608, August 2008. CODEN ???? ISSN 2150-8097.

Lo:2008:MPR

[160] David Lo and Siau-Cheng Khoo. Mining patterns and rules for software specification discovery. *Proceedings of the VLDB Endowment*, 1(2):1609–1616, August 2008. CODEN ???? ISSN 2150-8097.

Biveinis:2008:TEM

[161] Laurynas Biveinis and Simonas Saltenis. Towards efficient main-memory use for optimum tree index update. *Proceedings of the VLDB Endowment*, 1 (2):1617–1622, August 2008. CODEN ???? ISSN 2150-8097.

Holupirek:2008:IFT

[162] Alexander Holupirek and Marc H. Scholl. Implementing filesystems by tree-aware DBMSs. *Proceedings of the VLDB Endowment*, 1(2):1623–1630, August 2008. CODEN ???? ISSN 2150-8097.

Avanes:2008:AWS

[163] Artin Avanes and Johann-Christoph Freytag. Adaptive workflow scheduling

under resource allocation constraints and network dynamics. *Proceedings of the VLDB Endowment*, 1(2):1631–1637, August 2008. CODEN ???? ISSN 2150-8097.

Zerr:2008:PPD

[164] Sergej Zerr and Wolfgang Nejdl. Privacy preserving document indexing infrastructure for a distributed environment. *Proceedings of the VLDB Endowment*, 1(2):1638–1643, August 2008. CODEN ???? ISSN 2150-8097.

Miao:2008:GTG

[165] Jiajia Miao. GS-TMS: a global stream-based threat monitor system. *Proceedings of the VLDB Endowment*, 1(2): 1644–1651, August 2008. CODEN ???? ISSN 2150-8097.

Kharlamov:2008:III

[166] Evgeny Kharlamov and Werner Nutt. Incompleteness in information integration. *Proceedings of the VLDB Endowment*, 1(2):1652–1658, August 2008. CODEN ???? ISSN 2150-8097.

Deutch:2008:QWB

[167] Daniel Deutch and Tova Milo. Querying Web-based applications under models of uncertainty. *Proceedings of the VLDB Endowment*, 1(2):1659–1665, August 2008. CODEN ???? ISSN 2150-8097.

Silvasti:2008:XDF

[168] Panu Silvasti, Seppo Sippu, and Eljas Soisalon-Soininen. XML-document-filtering automaton. *Proceedings of the VLDB Endowment*, 1(2):1666–1671, August 2008. CODEN ???? ISSN 2150-8097.

Scholl:2008:CDD

[169] Tobias Scholl and Alfons Kemper. Community-driven data grids. *Proceedings of the VLDB Endowment*, 1(2): 1672–1677, August 2008. CODEN ???? ISSN 2150-8097.

Gatterbauer:2009:BIA

[170] Wolfgang Gatterbauer, Magdalena Balazinska, Nodira Khoussainova, and Dan Suciu. Believe it or not: adding belief annotations to databases. *Proceedings of the VLDB Endowment*, 2 (1):1–12, August 2009. CODEN ???? ISSN 2150-8097.

Zhang:2009:SSB

[171] Zhenjie Zhang, Beng Chin Ooi, Srinivasan Parthasarathy, and Anthony K. H. Tung. Similarity search on Bregman divergence: towards non-metric indexing. *Proceedings of the VLDB Endowment*, 2(1):13–24, August 2009. CODEN ???? ISSN 2150-8097.

Zeng:2009:CSA

[172] Zhiping Zeng, Anthony K. H. Tung, Jianyong Wang, Jianhua Feng, and Lizhu Zhou. Comparing stars: on approximating graph edit distance. *Proceedings of the VLDB Endowment*, 2 (1):25–36, August 2009. CODEN ???? ISSN 2150-8097.

Whang:2009:IBE

[173] Steven Euijong Whang, Hector Garcia-Molina, Chad Brower, Jayavel Shanmugasundaram, Sergei Vassilvitskii, Erik Vee, and Ramana Yerneni. Indexing Boolean expressions. *Proceedings of the VLDB Endowment*, 2(1):37–48, August 2009. CODEN ???? ISSN 2150-8097.

Zhou:2009:SDS

[174] Yongluan Zhou, Ali Salehi, and Karl Aberer. Scalable delivery of stream query result. *Proceedings of the VLDB Endowment*, 2(1):49–60, August 2009. CODEN ???? ISSN 2150-8097.

Benedikt:2009:SBI

[175] Michael Benedikt and James Cheney. Schema-based independence analysis for XML updates. *Proceedings of the VLDB Endowment*, 2(1):61–72, August 2009. CODEN ???? ISSN 2150-8097.

Nehme:2009:TSD

[176] Rimma V. Nehme, Elke A. Rundensteiner, and Elisa Bertino. Tagging stream data for rich real-time services. *Proceedings of the VLDB Endowment*, 2(1):73–84, August 2009. CODEN ???? ISSN 2150-8097.

Sarma:2009:RMP

[177] Atish Das Sarma, Ashwin Lall, Danupon Nanongkai, and Jun Xu. Randomized multi-pass streaming skyline algorithms. *Proceedings of the VLDB Endowment*, 2(1):85–96, August 2009. CODEN ???? ISSN 2150-8097.

Reeves:2009:MMT

[178] Galen Reeves, Jie Liu, Suman Nath, and Feng Zhao. Managing massive time series streams with multi-scale compressed trickles. *Proceedings of the VLDB Endowment*, 2(1):97–108, August 2009. CODEN ???? ISSN 2150-8097.

Wu:2009:PAM

[179] Tianyi Wu, Dong Xin, Qiaozhu Mei, and Jiawei Han. Promotion analysis in multi-dimensional space. *Proceedings of the VLDB Endowment*, 2(1): 109–120, August 2009. CODEN ???? ISSN 2150-8097.

Sarkas:2009:MDK

[180] Nikos Sarkas, Nilesh Bansal, Gautam Das, and Nick Koudas. Measure-driven keyword-query expansion. *Proceedings of the VLDB Endowment*, 2(1):121–132, August 2009. CODEN ???? ISSN 2150-8097.

Liu:2009:UTD

[181] Bin Liu and H. V. Jagadish. Using trees to depict a forest. *Proceedings of the VLDB Endowment*, 2(1):133–144, August 2009. CODEN ???? ISSN 2150-8097.

Elmeleegy:2009:OPW

[182] Hazem Elmeleegy, Ahmed K. Elmagarmid, Emmanuel Cecchet, Walid G. Aref, and Willy Zwaenepoel. Online piece-wise linear approximation of numerical streams with precision guarantees. *Proceedings of the VLDB Endowment*, 2(1):145–156, August 2009. CODEN ???? ISSN 2150-8097.

Stern:2009:WTE

[183] Mirco Stern, Erik Buchmann, and Klemens Böhm. A wavelet transform for efficient consolidation of sensor relations with quality guarantees. *Proceedings of the VLDB Endowment*, 2(1): 157–168, August 2009. CODEN ???? ISSN 2150-8097.

Yu:2009:EAQ

[184] Liu Yu, Jianzhong Li, Hong Gao, and Xiaolin Fang. Enabling ϵ-approximate querying in sensor networks. *Proceedings of the VLDB Endowment*, 2(1): 169–180, August 2009. CODEN ???? ISSN 2150-8097.

Nandi:2009:HUS

[185] Arnab Nandi and Philip A. Bernstein. HAMSTER: using search clicklogs for schema and taxonomy matching. *Proceedings of the VLDB Endowment*, 2 (1):181–192, August 2009. CODEN ???? ISSN 2150-8097.

Kot:2009:CUE

[186] Lucja Kot and Christoph Koch. Cooperative update exchange in the Youtopia system. *Proceedings of the VLDB Endowment*, 2(1):193–204, August 2009. CODEN ???? ISSN 2150-8097.

Papapetrou:2009:RBA

[187] Panagiotis Papapetrou, Vassilis Athitsos, George Kollios, and Dimitrios Gunopulos. Reference-based alignment in large sequence databases. *Proceedings of the VLDB Endowment*, 2(1): 205–216, August 2009. CODEN ???? ISSN 2150-8097.

Das:2009:TCM

[188] Sudipto Das, Shyam Antony, Divyakant Agrawal, and Amr El Abbadi. Thread cooperation in multicore architectures for frequency counting over multiple data streams. *Proceedings of the VLDB Endowment*, 2(1):217–228, August 2009. CODEN ???? ISSN 2150-8097.

Mueller:2009:SWQ

[189] Rene Mueller, Jens Teubner, and Gustavo Alonso. Streams on wires: a query compiler for FPGAs. *Proceedings of the VLDB Endowment*, 2(1):229–240, August 2009. CODEN ???? ISSN 2150-8097.

Chandramouli:2009:FPD

[190] Badrish Chandramouli, Jonathan Goldstein, and David Maier. On-the-fly progress detection in iterative stream queries. *Proceedings of the VLDB Endowment*, 2(1):241–252, August 2009. CODEN ???? ISSN 2150-8097.

Kraska:2009:CRC

[191] Tim Kraska, Martin Hentschel, Gustavo Alonso, and Donald Kossmann. Consistency rationing in the cloud: pay only when it matters. *Proceedings of the VLDB Endowment*, 2(1):253–264, August 2009. CODEN ???? ISSN 2150-8097.

Lomet:2009:LKR

[192] David Lomet and Mohamed F. Mokbel. Locking key ranges with unbundled transaction services. *Proceedings of the VLDB Endowment*, 2(1):265–276, August 2009. CODEN ???? ISSN 2150-8097.

Candea:2009:SPJ

[193] George Candea, Neoklis Polyzotis, and Radek Vingralek. A scalable, predictable join operator for highly concurrent data warehouses. *Proceedings of the VLDB Endowment*, 2(1):277–288, August 2009. CODEN ???? ISSN 2150-8097.

Gupta:2009:ATA

[194] Rahul Gupta and Sunita Sarawagi. Answering table augmentation queries from unstructured lists on the Web. *Proceedings of the VLDB Endowment*, 2(1):289–300, August 2009. CODEN ???? ISSN 2150-8097.

Cautis:2009:ERX

[195] Bogdan Cautis, Alin Deutsch, Nicola Onose, and Vasilis Vassalos. Efficient rewriting of XPath queries using Query Set Specifications. *Proceedings of the VLDB Endowment*, 2(1):301–312, August 2009. CODEN ???? ISSN 2150-8097.

Liu:2009:SSR

[196] Ziyang Liu, Peng Sun, and Yi Chen. Structured search result differentiation. *Proceedings of the VLDB Endowment*, 2(1):313–324, August 2009. CODEN ???? ISSN 2150-8097.

Dragut:2009:HAM

[197] Eduard C. Dragut, Thomas Kabisch, Clement Yu, and Ulf Leser. A hierarchical approach to model Web query interfaces for Web source integration. *Proceedings of the VLDB Endowment*, 2(1):325–336, August 2009. CODEN ???? ISSN 2150-8097.

Cong:2009:ERT

[198] Gao Cong, Christian S. Jensen, and Dingming Wu. Efficient retrieval of the top-k most relevant spatial Web objects. *Proceedings of the VLDB Endowment*, 2(1):337–348, August 2009. CODEN ???? ISSN 2150-8097.

Dragut:2009:SWR

[199] Eduard Dragut, Fang Fang, Prasad Sistla, Clement Yu, and Weiyi Meng. Stop word and related problems in Web interface integration. *Proceedings of the VLDB Endowment*, 2(1):349–360, August 2009. CODEN ???? ISSN 2150-8097.

Agrawal:2009:LAT

[200] Devesh Agrawal, Deepak Ganesan, Ramesh Sitaraman, Yanlei Diao, and Shashi Singh. Lazy-adaptive Tree: an optimized index structure for flash devices. *Proceedings of the VLDB Endowment*, 2(1):361–372, August 2009. CODEN ???? ISSN 2150-8097.

Lee:2009:MDM

[201] Rubao Lee, Xiaoning Ding, Feng Chen, Qingda Lu, and Xiaodong Zhang. MCC-DB: minimizing cache conflicts in multi-core processors for databases. *Proceedings of the VLDB Endowment*, 2(1):373–384, August 2009. CODEN ???? ISSN 2150-8097.

Willhalm:2009:SSU

[202] Thomas Willhalm, Nicolae Popovici, Yazan Boshmaf, Hasso Plattner, Alexander Zeier, and Jan Schaffner. SIMD-scan: ultra fast in-memory table scan using on-chip vector processing units. *Proceedings of the VLDB Endowment*, 2(1):385–394, August 2009. CODEN ???? ISSN 2150-8097.

Chaudhuri:2009:MDC

[203] Surajit Chaudhuri, Venkatesh Ganti, and Dong Xin. Mining document collections to facilitate accurate approximate entity matching. *Proceedings of the VLDB Endowment*, 2(1):395–406, August 2009. CODEN ???? ISSN 2150-8097.

Fan:2009:RAR

[204] Wenfei Fan, Xibei Jia, Jianzhong Li, and Shuai Ma. Reasoning about record matching rules. *Proceedings of the VLDB Endowment*, 2(1):407–418, August 2009. CODEN ???? ISSN 2150-8097.

Dobra:2009:TCE

[205] Alin Dobra, Chris Jermaine, Florin Rusu, and Fei Xu. Turbo-charging estimate convergence in DBO. *Proceedings of the VLDB Endowment*, 2(1): 419–430, August 2009. CODEN ???? ISSN 2150-8097.

Cohen:2009:CSA

[206] Edith Cohen, Nick Duffield, Haim Kaplan, Carsten Lund, and Mikkel Thorup. Composable, scalable, and accurate weight summarization of unaggregated data sets. *Proceedings of the VLDB Endowment*, 2(1):431–442, August 2009. CODEN ???? ISSN 2150-8097.

Wu:2009:DOA

[207] Sai Wu, Shouxu Jiang, Beng Chin Ooi, and Kian-Lee Tan. Distributed online aggregations. *Proceedings of the VLDB Endowment*, 2(1):443–454, August 2009. CODEN ???? ISSN 2150-8097.

Koloniari:2009:RBC

[208] Georgia Koloniari and Evaggelia Pitoura. A recall-based cluster formation game in peer-to-peer systems. *Proceedings of the VLDB Endowment*, 2(1): 455–466, August 2009. CODEN ???? ISSN 2150-8097.

Fekete:2009:QIA

[209] Alan Fekete, Shirley N. Goldrei, and Jorge Pérez Asenjo. Quantifying isolation anomalies. *Proceedings of the VLDB Endowment*, 2(1):467–478, August 2009. CODEN ???? ISSN 2150-8097.

Johnson:2009:IOS

[210] Ryan Johnson, Ippokratis Pandis, and Anastasia Ailamaki. Improving OLTP scalability using speculative lock inheritance. *Proceedings of the VLDB Endowment*, 2(1):479–489, August 2009. CODEN ???? ISSN 2150-8097.

Sears:2009:SBR

[211] Russell Sears and Eric Brewer. Segment-based recovery: write-ahead logging revisited. *Proceedings of the VLDB Endowment*, 2(1):490–501, August 2009. CODEN ???? ISSN 2150-8097.

Li:2009:UAR

[212] Jian Li, Barna Saha, and Amol Deshpande. A unified approach to ranking in probabilistic databases. *Proceedings of the VLDB Endowment*, 2(1): 502–513, August 2009. CODEN ???? ISSN 2150-8097.

Arasu:2009:LST

[213] Arvind Arasu, Surajit Chaudhuri, and Raghav Kaushik. Learning string transformations from examples. *Proceedings of the VLDB Endowment*, 2 (1):514–525, August 2009. CODEN ???? ISSN 2150-8097.

Cormode:2009:PHP

[214] Graham Cormode, Antonios Deligiannakis, Minos Garofalakis, and Andrew McGregor. Probabilistic histograms for probabilistic data. *Proceedings of the VLDB Endowment*, 2(1):526–537, August 2009. CODEN ???? ISSN 2150-8097.

Greenshpan:2009:AM

[215] Ohad Greenshpan, Tova Milo, and Neoklis Polyzotis. Autocompletion for

mashups. *Proceedings of the VLDB Endowment*, 2(1):538–549, August 2009. CODEN ???? ISSN 2150-8097.

Dong:2009:ICD

[216] Xin Luna Dong, Laure Berti-Equille, and Divesh Srivastava. Integrating conflicting data: the role of source dependence. *Proceedings of the VLDB Endowment*, 2(1):550–561, August 2009. CODEN ???? ISSN 2150-8097.

Dong:2009:TDC

[217] Xin Luna Dong, Laure Berti-Equille, and Divesh Srivastava. Truth discovery and copying detection in a dynamic world. *Proceedings of the VLDB Endowment*, 2(1):562–573, August 2009. CODEN ???? ISSN 2150-8097.

Golab:2009:SD

[218] Lukasz Golab, Howard Karloff, Flip Korn, Avishek Saha, and Divesh Srivastava. Sequential dependencies. *Proceedings of the VLDB Endowment*, 2 (1):574–585, August 2009. CODEN ???? ISSN 2150-8097.

Denev:2009:SFQ

[219] Dimitar Denev, Arturas Mazeika, Marc Spaniol, and Gerhard Weikum. SHARC: framework for quality-conscious Web archiving. *Proceedings of the VLDB Endowment*, 2(1):586–597, August 2009. CODEN ???? ISSN 2150-8097.

Beskales:2009:MQP

[220] George Beskales, Mohamed A. Soliman, Ihab F. Ilyas, and Shai Ben-David. Modeling and querying possible repairs in duplicate detection. *Proceedings of the VLDB Endowment*, 2(1): 598–609, August 2009. CODEN ???? ISSN 2150-8097.

Mindolin:2009:DRI

[221] Denis Mindolin and Jan Chomicki. Discovering relative importance of skyline attributes. *Proceedings of the VLDB Endowment*, 2(1):610–621, August 2009. CODEN ???? ISSN 2150-8097.

Kim:2009:PDB

[222] Min-Soo Kim and Jiawei Han. A particle-and-density based evolutionary clustering method for dynamic networks. *Proceedings of the VLDB Endowment*, 2(1):622–633, August 2009. CODEN ???? ISSN 2150-8097.

Yang:2009:SRD

[223] Xiaoyan Yang, Cecilia M. Procopiuc, and Divesh Srivastava. Summarizing relational databases. *Proceedings of the VLDB Endowment*, 2(1):634–645, August 2009. CODEN ???? ISSN 2150-8097.

Cohen:2009:CWS

[224] Edith Cohen, Haim Kaplan, and Subhabrata Sen. Coordinated weighted sampling for estimating aggregates over multiple weight assignments. *Proceedings of the VLDB Endowment*, 2(1): 646–657, August 2009. CODEN ???? ISSN 2150-8097.

Lee:2009:PLB

[225] Hongrae Lee, Raymond T. Ng, and Kyuseok Shim. Power-law based estimation of set similarity join size. *Proceedings of the VLDB Endowment*, 2 (1):658–669, August 2009. CODEN ???? ISSN 2150-8097.

Karras:2009:OSL

[226] Panagiotis Karras. Optimality and scalability in lattice histogram con-

struction. *Proceedings of the VLDB Endowment*, 2(1):670–681, August 2009. CODEN ???? ISSN 2150-8097.

Vigfusson:2009:APD

[227] Ymir Vigfusson, Adam Silberstein, Brian F. Cooper, and Rodrigo Fonseca. Adaptively parallelizing distributed range queries. *Proceedings of the VLDB Endowment*, 2(1):682–693, August 2009. CODEN ???? ISSN 2150-8097.

Tatikonda:2009:MTS

[228] Shirish Tatikonda and Srinivasan Parthasarathy. Mining tree-structured data on multicore systems. *Proceedings of the VLDB Endowment*, 2(1): 694–705, August 2009. CODEN ???? ISSN 2150-8097.

Unterbrunner:2009:PPU

[229] P. Unterbrunner, G. Giannikis, G. Alonso, D. Fauser, and D. Kossmann. Predictable performance for unpredictable workloads. *Proceedings of the VLDB Endowment*, 2(1):706–717, August 2009. CODEN ???? ISSN 2150-8097.

Zhou:2009:GCB

[230] Yang Zhou, Hong Cheng, and Jeffrey Xu Yu. Graph clustering based on structural/attribute similarities. *Proceedings of the VLDB Endowment*, 2 (1):718–729, August 2009. CODEN ???? ISSN 2150-8097.

AlHasan:2009:OSS

[231] Mohammad Al Hasan and Mohammed J. Zaki. Output space sampling for graph patterns. *Proceedings of the VLDB Endowment*, 2(1):730–741, August 2009. CODEN ???? ISSN 2150-8097.

Chen:2009:MGP

[232] Chen Chen, Cindy X. Lin, Matt Fredrikson, Mihai Christodorescu, Xifeng Yan, and Jiawei Han. Mining graph patterns efficiently via randomized summaries. *Proceedings of the VLDB Endowment*, 2(1):742–753, August 2009. CODEN ???? ISSN 2150-8097.

Amer-Yahia:2009:GRS

[233] Sihem Amer-Yahia, Senjuti Basu Roy, Ashish Chawlat, Gautam Das, and Cong Yu. Group recommendation: semantics and efficiency. *Proceedings of the VLDB Endowment*, 2(1):754–765, August 2009. CODEN ???? ISSN 2150-8097.

Bhagat:2009:CBG

[234] Smriti Bhagat, Graham Cormode, Balachander Krishnamurthy, and Divesh Srivastava. Class-based graph anonymization for social network data. *Proceedings of the VLDB Endowment*, 2(1):766–777, August 2009. CODEN ???? ISSN 2150-8097.

Sarkas:2009:ISS

[235] Nikos Sarkas, Gautam Das, and Nick Koudas. Improved search for socially annotated data. *Proceedings of the VLDB Endowment*, 2(1):778–789, August 2009. CODEN ???? ISSN 2150-8097.

Machanavajjhala:2009:DPA

[236] Ashwin Machanavajjhala, Johannes Gehrke, and Michaela Götz. Data publishing against realistic adversaries. *Proceedings of the VLDB Endowment*, 2(1):790–801, August 2009. CODEN ???? ISSN 2150-8097.

Pang:2009:SVO

[237] HweeHwa Pang, Jilian Zhang, and Kyriakos Mouratidis. Scalable verification for outsourced dynamic databases. *Proceedings of the VLDB Endowment*, 2(1):802–813, August 2009. CODEN ???? ISSN 2150-8097.

Xiao:2009:ORP

[238] Xiaokui Xiao, Yufei Tao, and Minghua Chen. Optimal random perturbation at multiple privacy levels. *Proceedings of the VLDB Endowment*, 2(1):814–825, August 2009. CODEN ???? ISSN 2150-8097.

Assent:2009:ADE

[239] Ira Assent, Marc Wichterich, Ralph Krieger, Hardy Kremer, and Thomas Seidl. Anticipatory DTW for efficient similarity search in time series databases. *Proceedings of the VLDB Endowment*, 2(1):826–837, August 2009. CODEN ???? ISSN 2150-8097.

Tsirogiannis:2009:IPL

[240] Dimitris Tsirogiannis, Sudipto Guha, and Nick Koudas. Improving the performance of list intersection. *Proceedings of the VLDB Endowment*, 2(1):838–849, August 2009. CODEN ???? ISSN 2150-8097.

Kaushik:2009:CHP

[241] Raghav Kaushik and Dan Suciu. Consistent histograms in the presence of distinct value counts. *Proceedings of the VLDB Endowment*, 2(1):850–861, August 2009. CODEN ???? ISSN 2150-8097.

Aggarwal:2009:GCI

[242] Charu Aggarwal, Yan Xie, and Philip S. Yu. GConnect: a connectivity index for massive disk-resident graphs. *Proceedings of the VLDB Endowment*, 2(1):862–873, August 2009. CODEN ???? ISSN 2150-8097.

Yang:2009:SES

[243] Di Yang, Elke A. Rundensteiner, and Matthew O. Ward. A shared execution strategy for multiple pattern mining requests over streaming data. *Proceedings of the VLDB Endowment*, 2(1):874–885, August 2009. CODEN ???? ISSN 2150-8097.

Zou:2009:DJP

[244] Lei Zou, Lei Chen, and M. Tamer Özsu. Distance-join: pattern match query in a large graph database. *Proceedings of the VLDB Endowment*, 2(1):886–897, August 2009. CODEN ???? ISSN 2150-8097.

Wan:2009:CCP

[245] Qian Wan, Raymond Chi-Wing Wong, Ihab F. Ilyas, M. Tamer Özsu, and Yu Peng. Creating competitive products. *Proceedings of the VLDB Endowment*, 2(1):898–909, August 2009. CODEN ???? ISSN 2150-8097.

Mueller:2009:DPF

[246] Rene Mueller, Jens Teubner, and Gustavo Alonso. Data processing on FPGAs. *Proceedings of the VLDB Endowment*, 2(1):910–921, August 2009. CODEN ???? ISSN 2150-8097.

Abouzeid:2009:HAH

[247] Azza Abouzeid, Kamil Bajda-Pawlikowski, Daniel Abadi, Avi Silberschatz, and

Alexander Rasin. HadoopDB: an architectural hybrid of MapReduce and DBMS technologies for analytical workloads. *Proceedings of the VLDB Endowment*, 2(1):922–933, August 2009. CODEN ???? ISSN 2150-8097.

He:2009:ASV

[248] Yeye He and Jeffrey F. Naughton. Anonymization of set-valued data via top-down, local generalization. *Proceedings of the VLDB Endowment*, 2 (1):934–945, August 2009. CODEN ???? ISSN 2150-8097.

Zou:2009:AGF

[249] Lei Zou, Lei Chen, and M. Tamer Özsu. k-automorphism: a general framework for privacy preserving network publication. *Proceedings of the VLDB Endowment*, 2(1):946–957, August 2009. CODEN ???? ISSN 2150-8097.

Koudas:2009:DBM

[250] Nick Koudas, Divesh Srivastava, Ting Yu, and Qing Zhang. Distribution based microdata anonymization. *Proceedings of the VLDB Endowment*, 2 (1):958–969, August 2009. CODEN ???? ISSN 2150-8097.

Meier:2009:CTB

[251] Michael Meier, Michael Schmidt, and Georg Lausen. On chase termination beyond stratification. *Proceedings of the VLDB Endowment*, 2(1):970–981, August 2009. CODEN ???? ISSN 2150-8097.

Moerkotte:2009:PBP

[252] Guido Moerkotte, Thomas Neumann, and Gabriele Steidl. Preventing bad plans by bounding the impact of cardinality estimation errors. *Proceedings of the VLDB Endowment*, 2(1):982–993, August 2009. CODEN ???? ISSN 2150-8097.

Chaudhuri:2009:ECQ

[253] Surajit Chaudhuri, Vivek Narasayya, and Ravi Ramamurthy. Exact cardinality query optimization for optimizer testing. *Proceedings of the VLDB Endowment*, 2(1):994–1005, August 2009. CODEN ???? ISSN 2150-8097.

tenCate:2009:LSM

[254] Balder ten Cate, Laura Chiticariu, Phokion Kolaitis, and Wang-Chiew Tan. Laconic schema mappings: computing the core with SQL queries. *Proceedings of the VLDB Endowment*, 2 (1):1006–1017, August 2009. CODEN ???? ISSN 2150-8097.

Arenas:2009:ISM

[255] Marcelo Arenas, Jorge Pérez, Juan Reutter, and Cristian Riveros. Inverting schema mappings: bridging the gap between theory and practice. *Proceedings of the VLDB Endowment*, 2(1): 1018–1029, August 2009. CODEN ???? ISSN 2150-8097.

Terwilliger:2009:FFF

[256] James F. Terwilliger, Philip A. Bernstein, and Sergey Melnik. Full-fidelity flexible object-oriented XML access. *Proceedings of the VLDB Endowment*, 2(1):1030–1041, August 2009. CODEN ???? ISSN 2150-8097.

Wang:2009:PAM

[257] Ting Wang and Ling Liu. Privacy-aware mobile services over road networks. *Proceedings of the VLDB*

Endowment, 2(1):1042–1053, August 2009. CODEN ???? ISSN 2150-8097.

U:2009:FAA

[258] Leong Hou U., Nikos Mamoulis, and Kyriakos Mouratidis. A fair assignment algorithm for multiple preference queries. *Proceedings of the VLDB Endowment*, 2(1):1054–1065, August 2009. CODEN ???? ISSN 2150-8097.

Mishima:2009:PED

[259] Takeshi Mishima and Hiroshi Nakamura. Pangea: an eager database replication middleware guaranteeing snapshot isolation without modification of database servers. *Proceedings of the VLDB Endowment*, 2(1):1066–1077, August 2009. CODEN ???? ISSN 2150-8097.

Elmeleegy:2009:HRT

[260] Hazem Elmeleegy, Jayant Madhavan, and Alon Halevy. Harvesting relational tables from lists on the web. *Proceedings of the VLDB Endowment*, 2(1): 1078–1089, August 2009. CODEN ???? ISSN 2150-8097.

Cafarella:2009:DIR

[261] Michael J. Cafarella, Alon Halevy, and Nodira Khoussainova. Data integration for the relational web. *Proceedings of the VLDB Endowment*, 2(1):1090–1101, August 2009. CODEN ???? ISSN 2150-8097.

Gottlob:2009:NOS

[262] Georg Gottlob, Reinhard Pichler, and Vadim Savenkov. Normalization and optimization of schema mappings. *Proceedings of the VLDB Endowment*, 2 (1):1102–1113, August 2009. CODEN ???? ISSN 2150-8097.

Xing:2009:CMN

[263] Songhua Xing, Cyrus Shahabi, and Bei Pan. Continuous monitoring of nearest neighbors on land surface. *Proceedings of the VLDB Endowment*, 2(1):1114–1125, August 2009. CODEN ???? ISSN 2150-8097.

Wong:2009:EMM

[264] Raymond Chi-Wing Wong, M. Tamer Özsu, Philip S. Yu, Ada Wai-Chee Fu, and Lian Liu. Efficient method for maximizing bichromatic reverse nearest neighbor. *Proceedings of the VLDB Endowment*, 2(1):1126–1137, August 2009. CODEN ???? ISSN 2150-8097.

Cheema:2009:LUE

[265] Muhammad Aamir Cheema, Xuemin Lin, Ying Zhang, Wei Wang, and Wenjie Zhang. Lazy updates: an efficient technique to continuously monitoring reverse kNN. *Proceedings of the VLDB Endowment*, 2(1):1138–1149, August 2009. CODEN ???? ISSN 2150-8097.

Chen:2009:NMM

[266] Ling Chen, Sourav S. Bhowmick, and Wolfgang Nejdl. NEAR-Miner: mining evolution associations of Web site directories for efficient maintenance of Web archives. *Proceedings of the VLDB Endowment*, 2(1):1150–1161, August 2009. CODEN ???? ISSN 2150-8097.

Wong:2009:AEO

[267] W. K. Wong, David W. Cheung, Edward Hung, Ben Kao, and Nikos Mamoulis. An audit environment for outsourcing of frequent itemset mining. *Proceedings of the VLDB Endowment*, 2(1):1162–1173, August 2009. CODEN ???? ISSN 2150-8097.

Mozafari:2009:PNB

[268] Barzan Mozafari and Carlo Zaniolo. Publishing naive Bayesian classifiers: privacy without accuracy loss. *Proceedings of the VLDB Endowment*, 2(1): 1174–1185, August 2009. CODEN ???? ISSN 2150-8097.

Tzoumas:2009:WAI

[269] Kostas Tzoumas, Man Lung Yiu, and Christian S. Jensen. Workload-aware indexing of continuously moving objects. *Proceedings of the VLDB Endowment*, 2(1):1186–1197, August 2009. CODEN ???? ISSN 2150-8097.

Zhang:2009:EIU

[270] Meihui Zhang, Su Chen, Christian S. Jensen, Beng Chin Ooi, and Zhenjie Zhang. Effectively indexing uncertain moving objects for predictive queries. *Proceedings of the VLDB Endowment*, 2(1):1198–1209, August 2009. CODEN ???? ISSN 2150-8097.

Sankaranarayanan:2009:POS

[271] Jagan Sankaranarayanan, Hanan Samet, and Houman Alborzi. Path oracles for spatial networks. *Proceedings of the VLDB Endowment*, 2(1):1210–1221, August 2009. CODEN ???? ISSN 2150-8097.

Kimura:2009:CMC

[272] Hideaki Kimura, George Huo, Alexander Rasin, Samuel Madden, and Stanley B. Zdonik. Correlation maps: a compressed access method for exploiting soft functional dependencies. *Proceedings of the VLDB Endowment*, 2 (1):1222–1233, August 2009. CODEN ???? ISSN 2150-8097.

Schnaitter:2009:IIP

[273] Karl Schnaitter, Neoklis Polyzotis, and Lise Getoor. Index interactions in physical design tuning: modeling, analysis, and applications. *Proceedings of the VLDB Endowment*, 2(1):1234–1245, August 2009. CODEN ???? ISSN 2150-8097.

Duan:2009:TDC

[274] Songyun Duan, Vamsidhar Thummala, and Shivnath Babu. Tuning database configuration parameters with iTuned. *Proceedings of the VLDB Endowment*, 2(1):1246–1257, August 2009. CODEN ???? ISSN 2150-8097.

Salles:2009:ECR

[275] Marcos Vaz Salles, Tuan Cao, Benjamin Sowell, Alan Demers, Johannes Gehrke, Christoph Koch, and Walker White. An evaluation of checkpoint recovery for massively multiplayer online games. *Proceedings of the VLDB Endowment*, 2(1):1258–1269, August 2009. CODEN ???? ISSN 2150-8097.

Muller:2009:ECS

[276] Emmanuel Müller, Stephan Günnemann, Ira Assent, and Thomas Seidl. Evaluating clustering in subspace projections of high dimensional data. *Proceedings of the VLDB Endowment*, 2(1):1270–1281, August 2009. CODEN ???? ISSN 2150-8097.

Hassanzadeh:2009:FEC

[277] Oktie Hassanzadeh, Fei Chiang, Hyun Chul Lee, and Renée J. Miller. Framework for evaluating clustering algorithms in duplicate detection. *Proceedings of the VLDB Endowment*, 2 (1):1282–1293, August 2009. CODEN ???? ISSN 2150-8097.

Guo:2009:DMM

[278] Hongfei Guo, Dan Jones, Jennifer Beckmann, and Praveen Seshadri. Declarative management in Microsoft SQL server. *Proceedings of the VLDB Endowment*, 2(2):1294–1305, August 2009. CODEN ???? ISSN 2150-8097.

El-Helw:2009:SRS

[279] Amr El-Helw, Ihab F. Ilyas, and Calisto Zuzarte. StatAdvisor: recommending statistical views. *Proceedings of the VLDB Endowment*, 2(2):1306–1317, August 2009. CODEN ???? ISSN 2150-8097.

Canim:2009:OPA

[280] Mustafa Canim, George A. Mihaila, Bishwaranjan Bhattacharjee, Kenneth A. Ross, and Christian A. Lang. An object placement advisor for DB2 using solid state storage. *Proceedings of the VLDB Endowment*, 2(2):1318–1329, August 2009. CODEN ???? ISSN 2150-8097.

Bhide:2009:XXP

[281] Manish Bhide, Manoj K. Agarwal, Amir Bar-Or, Sriram Padmanabhan, Srinivas K. Mittapalli, and Girish Venkatachaliah. XPEDIA: XML processing for data integration. *Proceedings of the VLDB Endowment*, 2(2):1330–1341, August 2009. CODEN ???? ISSN 2150-8097.

Bamford:2009:XR

[282] Roger Bamford, Vinayak Borkar, Matthias Brantner, Peter M. Fischer, Daniela Florescu, David Graf, Donald Kossmann, Tim Kraska, Dan Muresan, Sorin Nasoi, and Markos Zacharioudakis. XQuery reloaded. *Proceedings of the VLDB Endowment*, 2(2):1342–1353, August 2009. CODEN ???? ISSN 2150-8097.

Zhang:2009:BXS

[283] Ning Zhang, Nipun Agarwal, Sivasankaran Chandrasekar, Sam Idicula, Vijay Medi, Sabina Petride, and Balasubramanyam Sthanikam. Binary XML storage and query processing in Oracle 11g. *Proceedings of the VLDB Endowment*, 2(2):1354–1365, August 2009. CODEN ???? ISSN 2150-8097.

Bellamkonda:2009:ESO

[284] Srikanth Bellamkonda, Rafi Ahmed, Andrew Witkowski, Angela Amor, Mohamed Zait, and Chun-Chieh Lin. Enhanced subquery optimizations in Oracle. *Proceedings of the VLDB Endowment*, 2(2):1366–1377, August 2009. CODEN ???? ISSN 2150-8097.

Kim:2009:SVH

[285] Changkyu Kim, Tim Kaldewey, Victor W. Lee, Eric Sedlar, Anthony D. Nguyen, Nadathur Satish, Jatin Chhugani, Andrea Di Blas, and Pradeep Dubey. Sort vs. Hash revisited: fast join implementation on modern multi-core CPUs. *Proceedings of the VLDB Endowment*, 2(2):1378–1389, August 2009. CODEN ???? ISSN 2150-8097.

Xu:2009:EOJ

[286] Yu Xu and Pekka Kostamaa. Efficient outer join data skew handling in parallel DBMS. *Proceedings of the VLDB Endowment*, 2(2):1390–1396, August 2009. CODEN ???? ISSN 2150-8097.

Friedman:2009:SMP

[287] Eric Friedman, Peter Pawlowski, and John Cieslewicz. SQL/MapReduce: a

practical approach to self-describing, polymorphic, and parallelizable user-defined functions. *Proceedings of the VLDB Endowment*, 2(2):1402–1413, August 2009. CODEN ???? ISSN 2150-8097.

Gates:2009:BHL

[288] Alan F. Gates, Olga Natkovich, Shubham Chopra, Pradeep Kamath, Shravan M. Narayanamurthy, Christopher Olston, Benjamin Reed, Santhosh Srinivasan, and Utkarsh Srivastava. Building a high-level dataflow system on top of Map-Reduce: the Pig experience. *Proceedings of the VLDB Endowment*, 2(2):1414–1425, August 2009. CODEN ???? ISSN 2150-8097.

Panda:2009:PMP

[289] Biswanath Panda, Joshua S. Herbach, Sugato Basu, and Roberto J. Bayardo. PLANET: massively parallel learning of tree ensembles with MapReduce. *Proceedings of the VLDB Endowment*, 2(2):1426–1437, August 2009. CODEN ???? ISSN 2150-8097.

Legler:2009:RDT

[290] Thomas Legler, Wolfgang Lehner, Jan Schaffner, and Jens Krüger. Robust and distributed top-n frequent-pattern mining with SAP BW accelerator. *Proceedings of the VLDB Endowment*, 2 (2):1438–1449, August 2009. CODEN ???? ISSN 2150-8097.

Dieu:2009:TUF

[291] Nicolas Dieu, Adrian Dragusanu, Françoise Fabret, François Llirbat, and Eric Simon. 1,000 tables under the form. *Proceedings of the VLDB Endowment*, 2(2):1450–1461, August 2009. CODEN ???? ISSN 2150-8097.

Bhattacharjee:2009:EIC

[292] Bishwaranjan Bhattacharjee, Lipyeow Lim, Timothy Malkemus, George Mihaila, Kenneth Ross, Sherman Lau, Cathy McArthur, Zoltan Toth, and Reza Sherkat. Efficient index compression in DB2 LUW. *Proceedings of the VLDB Endowment*, 2(2):1462–1473, August 2009. CODEN ???? ISSN 2150-8097.

Lacroix:2009:SSW

[293] Zoé Lacroix, Christophe Legendre, and Spyro Mousses. Storing scientific workflows in a database. *Proceedings of the VLDB Endowment*, 2(2):1474–1480, August 2009. CODEN ???? ISSN 2150-8097.

Cohen:2009:MSN

[294] Jeffrey Cohen, Brian Dolan, Mark Dunlap, Joseph M. Hellerstein, and Caleb Welton. MAD skills: new analysis practices for big data. *Proceedings of the VLDB Endowment*, 2(2):1481–1492, August 2009. CODEN ???? ISSN 2150-8097.

Ley:2009:DSL

[295] Michael Ley. DBLP: some lessons learned. *Proceedings of the VLDB Endowment*, 2(2):1493–1500, August 2009. CODEN ???? ISSN 2150-8097.

Mukherjee:2009:OSP

[296] Niloy Mukherjee, Amit Ganesh, Vinayagam Djegaradjane, Sujatha Muthulingam, Wei Zhang, Krishna Kunchithapadam, Scott Lynn, Bharath Aleti, Kam Shergill, and Shaoyu Wang. Oracle SecureFiles: prepared for the digital deluge. *Proceedings of the VLDB Endowment*, 2(2):1501–1511,

August 2009. CODEN ???? ISSN 2150-8097.

Baumgartner:2009:SWD

[297] Robert Baumgartner, Georg Gottlob, and Marcus Herzog. Scalable Web data extraction for online market intelligence. *Proceedings of the VLDB Endowment*, 2(2):1512–1523, August 2009. CODEN ???? ISSN 2150-8097.

Rajaraman:2009:KHP

[298] Anand Rajaraman. Kosmix: high-performance topic exploration using the deep Web. *Proceedings of the VLDB Endowment*, 2(2):1524–1529, August 2009. CODEN ???? ISSN 2150-8097.

Nehme:2009:QMM

[299] Rimma V. Nehme, Karen E. Works, Elke A. Rundensteiner, and Elisa Bertino. Query mesh: multi-route query processing technology. *Proceedings of the VLDB Endowment*, 2(2): 1530–1533, August 2009. CODEN ???? ISSN 2150-8097.

Cudre-Mauroux:2009:DSS

[300] P. Cudre-Mauroux, H. Kimura, K.-T. Lim, J. Rogers, R. Simakov, E. Soroush, P. Velikhov, D. L. Wang, M. Balazinska, J. Becla, D. DeWitt, B. Heath, D. Maier, S. Madden, J. Patel, M. Stonebraker, and S. Zdonik. A demonstration of SciDB: a science-oriented DBMS. *Proceedings of the VLDB Endowment*, 2(2):1534–1537, August 2009. CODEN ???? ISSN 2150-8097.

Liu:2009:MMM

[301] Kuien Liu, Ke Deng, Zhiming Ding, Mingshu Li, and Xiaofang Zhou. MOIR/MT: monitoring large-scale road network traffic in real-time. *Proceedings of the VLDB Endowment*, 2 (2):1538–1541, August 2009. CODEN ???? ISSN 2150-8097.

Colle:2009:ODR

[302] Romain Colle, Leonidas Galanis, Supiti Buranawatanachoke, Stratos Papadomanolakis, and Yujun Wang. Oracle Database Replay. *Proceedings of the VLDB Endowment*, 2(2):1542–1545, August 2009. CODEN ???? ISSN 2150-8097.

Borisov:2009:DPD

[303] Nedyalko Borisov, Shivnath Babu, Sandeep Uttamchandani, Ramani Routray, and Aameek Singh. DIADS: a problem diagnosis tool for databases and storage area networks. *Proceedings of the VLDB Endowment*, 2(2):1546–1549, August 2009. CODEN ???? ISSN 2150-8097.

Herschel:2009:ASA

[304] Melanie Herschel, Mauricio A. Hernández, and Wang-Chiew Tan. Artemis: a system for analyzing missing answers. *Proceedings of the VLDB Endowment*, 2(2):1550–1553, August 2009. CODEN ???? ISSN 2150-8097.

Wu:2009:DTS

[305] Eugene Wu, Philippe Cudre-Mauroux, and Samuel Madden. Demonstration of the TrajStore system. *Proceedings of the VLDB Endowment*, 2(2):1554–1557, August 2009. CODEN ???? ISSN 2150-8097.

Ali:2009:MCS

[306] M. H. Ali, C. Gerea, B. S. Raman, B. Sezgin, T. Tarnavski, T. Verona,

P. Wang, P. Zabback, A. Ananthanarayan, A. Kirilov, M. Lu, A. Raizman, R. Krishnan, R. Schindlauer, T. Grabs, S. Bjeletich, B. Chandramouli, J. Goldstein, S. Bhat, Ying Li, V. Di Nicola, X. Wang, David Maier, S. Grell, O. Nano, and I. Santos. Microsoft CEP Server and online behavioral targeting. *Proceedings of the VLDB Endowment*, 2(2):1558–1561, August 2009. CODEN ???? ISSN 2150-8097.

Krompass:2009:TMD

[307] Stefan Krompass, Harumi Kuno, Janet L. Wiener, Kevin Wilkinson, Umeshwar Dayal, and Alfons Kemper. A testbed for managing dynamic mixed workloads. *Proceedings of the VLDB Endowment*, 2(2):1562–1565, August 2009. CODEN ???? ISSN 2150-8097.

Ahmad:2009:DSC

[308] Yanif Ahmad and Christoph Koch. DBToaster: a SQL compiler for high-performance delta processing in main-memory databases. *Proceedings of the VLDB Endowment*, 2(2):1566–1569, August 2009. CODEN ???? ISSN 2150-8097.

Preda:2009:AAK

[309] Nicoleta Preda, Fabian M. Suchanek, Gjergji Kasneci, Thomas Neumann, Maya Ramanath, and Gerhard Weikum. ANGIE: active knowledge for interactive exploration. *Proceedings of the VLDB Endowment*, 2(2):1570–1573, August 2009. CODEN ???? ISSN 2150-8097.

Kopcke:2009:CEE

[310] Hanna Köpcke, Andreas Thor, and Erhard Rahm. Comparative evaluation of entity resolution approaches with FEVER. *Proceedings of the VLDB Endowment*, 2(2):1574–1577, August 2009. CODEN ???? ISSN 2150-8097.

Brauer:2009:RDR

[311] Falk Brauer, Wojciech Barczynski, Gregor Hackenbroich, Marcus Schramm, Adrian Mocan, and Felix Förster. RankIE: document retrieval on ranked entity graphs. *Proceedings of the VLDB Endowment*, 2(2):1578–1581, August 2009. CODEN ???? ISSN 2150-8097.

Mecca:2009:CEM

[312] Giansalvatore Mecca, Paolo Papotti, Salvatore Raunich, and Marcello Buoncristiano. Concise and expressive mappings with +spicy. *Proceedings of the VLDB Endowment*, 2(2):1582–1585, August 2009. CODEN ???? ISSN 2150-8097.

Cruz:2009:AEM

[313] Isabel F. Cruz, Flavio Palandri Antonelli, and Cosmin Stroe. AgreementMaker: efficient matching for large real-world schemas and ontologies. *Proceedings of the VLDB Endowment*, 2(2):1586–1589, August 2009. CODEN ???? ISSN 2150-8097.

Hassanzadeh:2009:LQW

[314] Oktie Hassanzadeh, Reynold Xin, Renée J. Miller, Anastasios Kementsietsidis, Lipyeow Lim, and Min Wang. Linkage Query Writer. *Proceedings of the VLDB Endowment*, 2(2):1590–1593, August 2009. CODEN ???? ISSN 2150-8097.

Wang:2009:SEE

[315] Xiaoyuan Wang, Xingzhi Sun, Feng Cao, Li Ma, Nick Kanellos, Kang

Zhang, Yue Pan, and Yong Yu. SMDM: enhancing enterprise-wide master data management using semantic Web technologies. *Proceedings of the VLDB Endowment*, 2(2):1594–1597, August 2009. CODEN ???? ISSN 2150-8097.

Gubanov:2009:IUR

[316] Michael N. Gubanov, Lucian Popa, Howard Ho, Hamid Pirahesh, Jeng-Yih Chang, and Shr-Chang Chen. IBM UFO repository: object-oriented data integration. *Proceedings of the VLDB Endowment*, 2(2):1598–1601, August 2009. CODEN ???? ISSN 2150-8097.

Chen:2009:MSW

[317] Huajun Chen, Bin Lu, Yuan Ni, Guotong Xie, Chunying Zhou, Jinhua Mi, and Zhaohui Wu. Mashup by surfing a Web of data APIs. *Proceedings of the VLDB Endowment*, 2(2):1602–1605, August 2009. CODEN ???? ISSN 2150-8097.

Pichler:2009:DDE

[318] Reinhard Pichler and Vadim Savenkov. DEMo: data exchange modeling tool. *Proceedings of the VLDB Endowment*, 2(2):1606–1609, August 2009. CODEN ???? ISSN 2150-8097.

Letchner:2009:LDW

[319] Julie Letchner, Christopher Ré, Magdalena Balazinska, and Matthai Philipose. Lahar demonstration: warehousing Markovian streams. *Proceedings of the VLDB Endowment*, 2(2):1610–1613, August 2009. CODEN ???? ISSN 2150-8097.

Sun:2009:WAC

[320] Peng Sun, Ziyang Liu, Sivaramakrishnan Natarajan, Susan B. Davidson, and Yi Chen. WOLVES: achieving correct provenance analysis by detecting and resolving unsound workflow views. *Proceedings of the VLDB Endowment*, 2(2):1614–1617, August 2009. CODEN ???? ISSN 2150-8097.

Dai:2009:TTI

[321] Chenyun Dai, Gabriel Ghinita, Elisa Bertino, Ji-Won Byun, and Ninghui Li. TIAMAT: a tool for interactive analysis of microdata anonymization techniques. *Proceedings of the VLDB Endowment*, 2(2):1618–1621, August 2009. CODEN ???? ISSN 2150-8097.

Yu:2009:IIN

[322] Yintao Yu, Cindy X. Lin, Yizhou Sun, Chen Chen, Jiawei Han, Binbin Liao, Tianyi Wu, ChengXiang Zhai, Duo Zhang, and Bo Zhao. iNextCube: information network-enhanced text cube. *Proceedings of the VLDB Endowment*, 2(2):1622–1625, August 2009. CODEN ???? ISSN 2150-8097.

Thusoo:2009:HWS

[323] Ashish Thusoo, Joydeep Sen Sarma, Namit Jain, Zheng Shao, Prasad Chakka, Suresh Anthony, Hao Liu, Pete Wyckoff, and Raghotham Murthy. Hive: a warehousing solution over a map-reduce framework. *Proceedings of the VLDB Endowment*, 2(2):1626–1629, August 2009. CODEN ???? ISSN 2150-8097.

Satish:2009:TEB

[324] Arjun Satish, Ramesh Jain, and Amarnath Gupta. Tolkien: an event based storytelling system. *Proceedings of the VLDB Endowment*, 2(2):1630–1633, August 2009. CODEN ???? ISSN 2150-8097.

Sarigol:2009:ESN

[325] Emre Sarigöl, Oriana Riva, Patrick Stuedi, and Gustavo Alonso. Enabling social networking in ad hoc networks of mobile phones. *Proceedings of the VLDB Endowment*, 2(2):1634–1637, August 2009. CODEN ???? ISSN 2150-8097.

Bao:2009:PVD

[326] Zhuowei Bao, Sarah Cohen-Boulakia, Susan B. Davidson, and Pierrick Girard. PDiffView: viewing the difference in provenance of workflow results. *Proceedings of the VLDB Endowment*, 2(2):1638–1641, August 2009. CODEN ???? ISSN 2150-8097.

Deutch:2009:GOW

[327] Daniel Deutch, Tova Milo, and Tom Yam. Goal-oriented Web-site navigation for on-line shoppers. *Proceedings of the VLDB Endowment*, 2(2):1642–1645, August 2009. CODEN ???? ISSN 2150-8097.

Pereira:2009:AWQ

[328] Fernando Pereira, Anand Rajaraman, Sunita Sarawagi, William Tunstall-Pedoe, Gerhard Weikum, and Alon Halevy. Answering Web questions using structured data: dream or reality? *Proceedings of the VLDB Endowment*, 2(2):1646, August 2009. CODEN ???? ISSN 2150-8097.

Bernstein:2009:HBB

[329] Philip A. Bernstein, Daniel J. Abadi, Michael J. Cafarella, Joseph M. Hellerstein, Donald Kossmann, and Samuel Madden. How best to build Web-scale data managers? *Proceedings of the VLDB Endowment*, 2(2):1647, August 2009. CODEN ???? ISSN 2150-8097.

Manegold:2009:DAE

[330] Stefan Manegold, Martin L. Kersten, and Peter Boncz. Database architecture evolution: mammals flourished long before dinosaurs became extinct. *Proceedings of the VLDB Endowment*, 2(2):1648–1653, August 2009. CODEN ???? ISSN 2150-8097.

Dong:2009:DFR

[331] Xin Luna Dong and Felix Naumann. Data fusion: resolving data conflicts for integration. *Proceedings of the VLDB Endowment*, 2(2):1654–1655, August 2009. CODEN ???? ISSN 2150-8097.

Heer:2009:DVS

[332] Jeffrey Heer and Joseph M. Hellerstein. Data visualization and social data analysis. *Proceedings of the VLDB Endowment*, 2(2):1656–1657, August 2009. CODEN ???? ISSN 2150-8097.

Chaudhuri:2009:KQR

[333] Surajit Chaudhuri and Gautam Das. Keyword querying and ranking in databases. *Proceedings of the VLDB Endowment*, 2(2):1658–1659, August 2009. CODEN ???? ISSN 2150-8097.

Hadjieleftheriou:2009:EAS

[334] Marios Hadjieleftheriou and Chen Li. Efficient approximate search on string collections. *Proceedings of the VLDB Endowment*, 2(2):1660–1661, August 2009. CODEN ???? ISSN 2150-8097.

Srivastava:2009:ITD

[335] Divesh Srivastava and Suresh Venkatasubramanian. Information theory for data management. *Proceedings of the VLDB Endowment*, 2(2):1662–1663, August 2009. CODEN ???? ISSN 2150-8097.

Abadi:2009:COD

[336] Daniel J. Abadi, Peter A. Boncz, and Stavros Harizopoulos. Column-oriented database systems. *Proceedings of the VLDB Endowment*, 2(2):1664–1665, August 2009. CODEN ???? ISSN 2150-8097.

Srivastava:2010:ERT

[337] Divesh Srivastava, Lukasz Golab, Rick Greer, Theodore Johnson, Joseph Seidel, Vladislav Shkapenyuk, Oliver Spatscheck, and Jennifer Yates. Enabling real time data analysis. *Proceedings of the VLDB Endowment*, 3(1–2): 1–2, September 2010. CODEN ???? ISSN 2150-8097.

Matsudaira:2010:HEB

[338] Paul Matsudaira. High-end biological imaging generates very large 3D+ and dynamic datasets. *Proceedings of the VLDB Endowment*, 3(1–2):3, September 2010. CODEN ???? ISSN 2150-8097.

Cho:2010:DWD

[339] Junghoo Cho and Hector Garcia-Molina. Dealing with Web data: history and look ahead. *Proceedings of the VLDB Endowment*, 3(1–2):4, September 2010. CODEN ???? ISSN 2150-8097.

Kemme:2010:DRT

[340] Bettina Kemme and Gustavo Alonso. Database replication: a tale of research across communities. *Proceedings of the VLDB Endowment*, 3(1–2):5–12, September 2010. CODEN ???? ISSN 2150-8097.

Canim:2010:BDR

[341] Mustafa Canim, Murat Kantarcioğlu, Bijit Hore, and Sharad Mehrotra. Building disclosure risk aware query optimizers for relational databases. *Proceedings of the VLDB Endowment*, 3(1–2):13–24, September 2010. CODEN ???? ISSN 2150-8097.

Allard:2010:SPD

[342] Tristan Allard, Nicolas Anciaux, Luc Bouganim, Yanli Guo, Lionel Le Folgoc, Benjamin Nguyen, Philippe Pucheral, Indrajit Ray, Indrakshi Ray, and Shaoyi Yin. Secure personal data servers: a vision paper. *Proceedings of the VLDB Endowment*, 3(1–2):25–35, September 2010. CODEN ???? ISSN 2150-8097.

Fabbri:2010:PMR

[343] Daniel Fabbri, Kristen LeFevre, and Qiang Zhu. PolicyReplay: misconfiguration-response queries for data breach reporting. *Proceedings of the VLDB Endowment*, 3(1–2):36–47, September 2010. CODEN ???? ISSN 2150-8097.

Curino:2010:SWD

[344] Carlo Curino, Evan Jones, Yang Zhang, and Sam Madden. Schism: a workload-driven approach to database replication and partitioning. *Proceedings of the VLDB Endowment*, 3(1–2): 48–57, September 2010. CODEN ???? ISSN 2150-8097.

Qin:2010:TTS

[345] Lu Qin, Jeffrey Xu Yu, and Lijun Chang. Ten thousand SQLs: parallel keyword queries computing. *Proceedings of the VLDB Endowment*, 3(1–2):

58–69, September 2010. CODEN ???? ISSN 2150-8097.

Thomson:2010:CDD

[346] Alexander Thomson and Daniel J. Abadi. The case for determinism in database systems. *Proceedings of the VLDB Endowment*, 3(1–2):70–80, September 2010. CODEN ???? ISSN 2150-8097.

Alexe:2010:MCI

[347] Bogdan Alexe, Mauricio Hernández, Lucian Popa, and Wang-Chiew Tan. MapMerge: correlating independent schema mappings. *Proceedings of the VLDB Endowment*, 3(1–2):81–92, September 2010. CODEN ???? ISSN 2150-8097.

Greco:2010:CTC

[348] Sergio Greco and Francesca Spezzano. Chase termination: a constraints rewriting approach. *Proceedings of the VLDB Endowment*, 3(1–2):93–104, September 2010. CODEN ???? ISSN 2150-8097.

Marnette:2010:SDE

[349] Bruno Marnette, Giansalvatore Mecca, and Paolo Papotti. Scalable data exchange with functional dependencies. *Proceedings of the VLDB Endowment*, 3(1–2):105–116, September 2010. CODEN ???? ISSN 2150-8097.

Kanza:2010:IRS

[350] Yaron Kanza, Roy Levin, Eliyahu Safra, and Yehoshua Sagiv. Interactive route search in the presence of order constraints. *Proceedings of the VLDB Endowment*, 3(1–2):117–128, September 2010. CODEN ???? ISSN 2150-8097.

Lang:2010:EMM

[351] Willis Lang and Jignesh M. Patel. Energy management for MapReduce clusters. *Proceedings of the VLDB Endowment*, 3(1–2):129–139, September 2010. CODEN ???? ISSN 2150-8097.

Baid:2010:TSK

[352] Akanksha Baid, Ian Rae, Jiexing Li, AnHai Doan, and Jeffrey Naughton. Toward scalable keyword search over relational data. *Proceedings of the VLDB Endowment*, 3(1–2):140–149, September 2010. CODEN ???? ISSN 2150-8097.

Mozafari:2010:REN

[353] Barzan Mozafari, Kai Zeng, and Carlo Zaniolo. From regular expressions to nested words: unifying languages and query execution for relational and XML sequences. *Proceedings of the VLDB Endowment*, 3(1–2):150–161, September 2010. CODEN ???? ISSN 2150-8097.

Grust:2010:ASL

[354] Torsten Grust, Jan Rittinger, and Tom Schreiber. Avalanche-safe LINQ compilation. *Proceedings of the VLDB Endowment*, 3(1–2):162–172, September 2010. CODEN ???? ISSN 2150-8097.

Fan:2010:TCF

[355] Wenfei Fan, Jianzhong Li, Shuai Ma, Nan Tang, and Wenyuan Yu. Towards certain fixes with editing rules and master data. *Proceedings of the VLDB Endowment*, 3(1–2):173–184, September 2010. CODEN ???? ISSN 2150-8097.

Herschel:2010:EMA

[356] Melanie Herschel and Mauricio A. Hernández. Explaining missing answers to SPJUA queries. *Proceedings of the VLDB Endowment*, 3(1–2):185–196, September 2010. CODEN ???? ISSN 2150-8097.

Beskales:2010:SRF

[357] George Beskales, Ihab F. Ilyas, and Lukasz Golab. Sampling the repairs of functional dependency violations under hard constraints. *Proceedings of the VLDB Endowment*, 3(1–2):197–207, September 2010. CODEN ???? ISSN 2150-8097.

Menestrina:2010:EER

[358] David Menestrina, Steven Euijong Whang, and Hector Garcia-Molina. Evaluating entity resolution results. *Proceedings of the VLDB Endowment*, 3(1–2):208–219, September 2010. CODEN ???? ISSN 2150-8097.

Chandramouli:2010:HPD

[359] Badrish Chandramouli, Jonathan Goldstein, and David Maier. High-performance dynamic pattern matching over disordered streams. *Proceedings of the VLDB Endowment*, 3(1–2):220–231, September 2010. CODEN ???? ISSN 2150-8097.

Botan:2010:SMA

[360] Irina Botan, Roozbeh Derakhshan, Nihal Dindar, Laura Haas, Renée J. Miller, and Nesime Tatbul. SECRET: a model for analysis of the execution semantics of stream processing systems. *Proceedings of the VLDB Endowment*, 3(1–2):232–243, September 2010. CODEN ???? ISSN 2150-8097.

Zhang:2010:RPS

[361] Haopeng Zhang, Yanlei Diao, and Neil Immerman. Recognizing patterns in streams with imprecise timestamps. *Proceedings of the VLDB Endowment*, 3(1–2):244–255, September 2010. CODEN ???? ISSN 2150-8097.

Neumann:2010:XRF

[362] Thomas Neumann and Gerhard Weikum. x-RDF-3X: fast querying, high update rates, and consistency for RDF databases. *Proceedings of the VLDB Endowment*, 3(1–2):256–263, September 2010. CODEN ???? ISSN 2150-8097.

Fan:2010:GPM

[363] Wenfei Fan, Jianzhong Li, Shuai Ma, Nan Tang, Yinghui Wu, and Yunpeng Wu. Graph pattern matching: from intractable to polynomial time. *Proceedings of the VLDB Endowment*, 3 (1–2):264–275, September 2010. CODEN ???? ISSN 2150-8097.

Yildirim:2010:GSR

[364] Hilmi Yildirim, Vineet Chaoji, and Mohammed J. Zaki. GRAIL: scalable reachability index for large graphs. *Proceedings of the VLDB Endowment*, 3(1–2):276–284, September 2010. CODEN ???? ISSN 2150-8097.

Bu:2010:HEI

[365] Yingyi Bu, Bill Howe, Magdalena Balazinska, and Michael D. Ernst. HaLoop: efficient iterative data processing on large clusters. *Proceedings of the VLDB Endowment*, 3(1–2):285–296, September 2010. CODEN ???? ISSN 2150-8097.

Benedikt:2010:IVV

[366] Michael Benedikt and Georg Gottlob. The impact of virtual views on containment. *Proceedings of the VLDB Endowment*, 3(1–2):297–308, September 2010. CODEN ???? ISSN 2150-8097.

Terwilliger:2010:UET

[367] James F. Terwilliger, Lois M. L. Delcambre, David Maier, Jeremy Steinhauer, and Scott Britell. Updatable and evolvable transforms for virtual databases. *Proceedings of the VLDB Endowment*, 3(1–2):309–319, September 2010. CODEN ???? ISSN 2150-8097.

Deutch:2010:NCM

[368] Daniel Deutch, Ohad Greenshpan, and Tova Milo. Navigating in complex mashed-up applications. *Proceedings of the VLDB Endowment*, 3(1–2):320–329, September 2010. CODEN ???? ISSN 2150-8097.

Melnik:2010:DIA

[369] Sergey Melnik, Andrey Gubarev, Jing Jing Long, Geoffrey Romer, Shiva Shivakumar, Matt Tolton, and Theo Vassilakis. Dremel: interactive analysis of Web-scale datasets. *Proceedings of the VLDB Endowment*, 3(1–2):330–339, September 2010. CODEN ???? ISSN 2150-8097.

Zhao:2010:GQO

[370] Peixiang Zhao and Jiawei Han. On graph query optimization in large networks. *Proceedings of the VLDB Endowment*, 3(1–2):340–351, September 2010. CODEN ???? ISSN 2150-8097.

Martinenghi:2010:PRJ

[371] Davide Martinenghi and Marco Tagliasacchi. Proximity rank join. *Proceedings of the VLDB Endowment*, 3(1–2):352–363, September 2010. CODEN ???? ISSN 2150-8097.

Vlachou:2010:IMI

[372] Akrivi Vlachou, Christos Doulkeridis, Kjetil Nørvåg, and Yannis Kotidis. Identifying the most influential data objects with reverse top-k queries. *Proceedings of the VLDB Endowment*, 3 (1–2):364–372, September 2010. CODEN ???? ISSN 2150-8097.

Cao:2010:RTP

[373] Xin Cao, Gao Cong, and Christian S. Jensen. Retrieving top-k prestige-based relevant spatial Web objects. *Proceedings of the VLDB Endowment*, 3(1–2):373–384, September 2010. CODEN ???? ISSN 2150-8097.

Li:2010:PLF

[374] Lei Li, B. Aditya Prakash, and Christos Faloutsos. Parsimonious linear fingerprinting for time series. *Proceedings of the VLDB Endowment*, 3(1–2):385–396, September 2010. CODEN ???? ISSN 2150-8097.

Zhang:2010:HTM

[375] Rui Zhang and Martin Stradling. The HV-tree: a memory hierarchy aware version index. *Proceedings of the VLDB Endowment*, 3(1–2):397–408, September 2010. CODEN ???? ISSN 2150-8097.

Pramanik:2010:TRQ

[376] Sakti Pramanik, Alok Watve, Chad R. Meiners, and Alex Liu. Transforming

range queries to equivalent box queries to optimize page access. *Proceedings of the VLDB Endowment*, 3(1–2):409–416, September 2010. CODEN ???? ISSN 2150-8097.

Guo:2010:RLU

[377] Songtao Guo, Xin Luna Dong, Divesh Srivastava, and Remi Zajac. Record linkage with uniqueness constraints and erroneous values. *Proceedings of the VLDB Endowment*, 3(1–2):417–428, September 2010. CODEN ???? ISSN 2150-8097.

Ioannou:2010:FEA

[378] Ekaterini Ioannou, Wolfgang Nejdl, Claudia Niederée, and Yannis Velegrakis. On-the-fly entity-aware query processing in the presence of linkage. *Proceedings of the VLDB Endowment*, 3(1–2):429–438, September 2010. CODEN ???? ISSN 2150-8097.

Yakout:2010:BBR

[379] Mohamed Yakout, Ahmed K. Elmagarmid, Hazem Elmeleegy, Mourad Ouzzani, and Alan Qi. Behavior based record linkage. *Proceedings of the VLDB Endowment*, 3(1–2):439–448, September 2010. CODEN ???? ISSN 2150-8097.

Han:2010:IFC

[380] Wook-Shin Han, Jinsoo Lee, Minh-Duc Pham, and Jeffrey Xu Yu. iGraph: a framework for comparisons of disk-based graph indexing techniques. *Proceedings of the VLDB Endowment*, 3(1–2):449–459, September 2010. CODEN ???? ISSN 2150-8097.

Schad:2010:RMC

[381] Jörg Schad, Jens Dittrich, and Jorge-Arnulfo Quiané-Ruiz. Runtime measurements in the cloud: observing, analyzing, and reducing variance. *Proceedings of the VLDB Endowment*, 3(1–2):460–471, September 2010. CODEN ???? ISSN 2150-8097.

Jiang:2010:PMD

[382] Dawei Jiang, Beng Chin Ooi, Lei Shi, and Sai Wu. The performance of MapReduce: an in-depth study. *Proceedings of the VLDB Endowment*, 3(1–2):472–483, September 2010. CODEN ???? ISSN 2150-8097.

Kopcke:2010:EER

[383] Hanna Köpcke, Andreas Thor, and Erhard Rahm. Evaluation of entity resolution approaches on real-world match problems. *Proceedings of the VLDB Endowment*, 3(1–2):484–493, September 2010. CODEN ???? ISSN 2150-8097.

Nykiel:2010:MSA

[384] Tomasz Nykiel, Michalis Potamias, Chaitanya Mishra, George Kollios, and Nick Koudas. MRShare: sharing across multiple queries in MapReduce. *Proceedings of the VLDB Endowment*, 3(1–2):494–505, September 2010. CODEN ???? ISSN 2150-8097.

Vo:2010:TET

[385] Hoang Tam Vo, Chun Chen, and Beng Chin Ooi. Towards elastic transactional cloud storage with range query support. *Proceedings of the VLDB Endowment*, 3(1–2):506–514, September 2010. CODEN ???? ISSN 2150-8097.

Dittrich:2010:HMY

[386] Jens Dittrich, Jorge-Arnulfo Quiané-Ruiz, Alekh Jindal, Yagiz Kargin, Vinay Setty, and Jörg Schad.

Hadoop++: making a yellow elephant run like a cheetah (without it even noticing). *Proceedings of the VLDB Endowment*, 3(1–2):515–529, September 2010. CODEN ???? ISSN 2150-8097.

Bruno:2010:SLR

[387] Nicolas Bruno, Vivek Narasayya, and Ravi Ramamurthy. Slicing long-running queries. *Proceedings of the VLDB Endowment*, 3(1–2):530–541, September 2010. CODEN ???? ISSN 2150-8097.

Tzoumas:2010:SAH

[388] Kostas Tzoumas, Amol Deshpande, and Christian S. Jensen. Sharing-aware horizontal partitioning for exploiting correlations during query processing. *Proceedings of the VLDB Endowment*, 3(1–2):542–553, September 2010. CODEN ???? ISSN 2150-8097.

Cali:2010:APO

[389] Andrea Calì, Georg Gottlob, and Andreas Pieris. Advanced processing for ontological queries. *Proceedings of the VLDB Endowment*, 3(1–2):554–565, September 2010. CODEN ???? ISSN 2150-8097.

Parameswaran:2010:TWC

[390] Aditya Parameswaran, Hector Garcia-Molina, and Anand Rajaraman. Towards the Web of concepts: extracting concepts from large datasets. *Proceedings of the VLDB Endowment*, 3(1–2):566–577, September 2010. CODEN ???? ISSN 2150-8097.

Gulhane:2010:ECR

[391] Pankaj Gulhane, Rajeev Rastogi, Srinivasan H. Sengamedu, and Ashwin Tengli. Exploiting content redundancy for Web information extraction. *Proceedings of the VLDB Endowment*, 3(1–2):578–587, September 2010. CODEN ???? ISSN 2150-8097.

Liu:2010:ARR

[392] Bin Liu, Laura Chiticariu, Vivian Chu, H. V. Jagadish, and Frederick R. Reiss. Automatic rule refinement for information extraction. *Proceedings of the VLDB Endowment*, 3(1–2):588–597, September 2010. CODEN ???? ISSN 2150-8097.

Pang:2010:ETS

[393] HweeHwa Pang, Xuhua Ding, and Xiaokui Xiao. Embellishing text search queries to protect user privacy. *Proceedings of the VLDB Endowment*, 3(1–2):598–607, September 2010. CODEN ???? ISSN 2150-8097.

Chaytor:2010:SDR

[394] Rhonda Chaytor and Ke Wang. Small domain randomization: same privacy, more utility. *Proceedings of the VLDB Endowment*, 3(1–2):608–618, September 2010. CODEN ???? ISSN 2150-8097.

Papadopoulos:2010:NNS

[395] Stavros Papadopoulos, Spiridon Bakiras, and Dimitris Papadias. Nearest neighbor search with strong location privacy. *Proceedings of the VLDB Endowment*, 3(1–2):619–629, September 2010. CODEN ???? ISSN 2150-8097.

Kimura:2010:UPI

[396] Hideaki Kimura, Samuel Madden, and Stanley B. Zdonik. UPI: a primary index for uncertain databases. *Proceedings of the VLDB Endowment*, 3(1–

2):630–637, September 2010. CODEN ???? ISSN 2150-8097.

Li:2010:RCP

[397] Jian Li and Amol Deshpande. Ranking continuous probabilistic datasets. *Proceedings of the VLDB Endowment*, 3 (1–2):638–649, September 2010. CODEN ???? ISSN 2150-8097.

Lian:2010:SSJ

[398] Xiang Lian and Lei Chen. Set similarity join on probabilistic data. *Proceedings of the VLDB Endowment*, 3 (1–2):650–659, September 2010. CODEN ???? ISSN 2150-8097.

Woods:2010:CED

[399] Louis Woods, Jens Teubner, and Gustavo Alonso. Complex event detection at wire speed with FPGAs. *Proceedings of the VLDB Endowment*, 3(1–2):660–669, September 2010. CODEN ???? ISSN 2150-8097.

Fang:2010:DCG

[400] Wenbin Fang, Bingsheng He, and Qiong Luo. Database compression on graphics processors. *Proceedings of the VLDB Endowment*, 3(1–2):670–680, September 2010. CODEN ???? ISSN 2150-8097.

Johnson:2010:ASA

[401] Ryan Johnson, Ippokratis Pandis, Radu Stoica, Manos Athanassoulis, and Anastasia Ailamaki. Aether: a scalable approach to logging. *Proceedings of the VLDB Endowment*, 3(1–2):681–692, September 2010. CODEN ???? ISSN 2150-8097.

Macropol:2010:SDB

[402] Kathy Macropol and Ambuj Singh. Scalable discovery of best clusters on large graphs. *Proceedings of the VLDB Endowment*, 3(1–2):693–702, September 2010. CODEN ???? ISSN 2150-8097.

Smola:2010:APT

[403] Alexander Smola and Shravan Narayanamurthy. An architecture for parallel topic models. *Proceedings of the VLDB Endowment*, 3(1–2):703–710, September 2010. CODEN ???? ISSN 2150-8097.

Ganti:2010:KFI

[404] Venkatesh Ganti, Yeye He, and Dong Xin. Keyword++: a framework to improve keyword search over entity databases. *Proceedings of the VLDB Endowment*, 3(1–2):711–722, September 2010. CODEN ???? ISSN 2150-8097.

Li:2010:SMR

[405] Zhenhui Li, Bolin Ding, Jiawei Han, and Roland Kays. Swarm: mining relaxed temporal moving object clusters. *Proceedings of the VLDB Endowment*, 3(1–2):723–734, September 2010. CODEN ???? ISSN 2150-8097.

Chen:2010:AUP

[406] Su Chen, Beng Chin Ooi, and Zhenjie Zhang. An adaptive updating protocol for reducing moving object database workload. *Proceedings of the VLDB Endowment*, 3(1–2):735–746, September 2010. CODEN ???? ISSN 2150-8097.

Kellaris:2010:SPC

[407] Georgios Kellaris and Kyriakos Mouratidis. Shortest path computation on air indexes. *Proceedings of the VLDB*

Endowment, 3(1–2):747–757, September 2010. CODEN ???? ISSN 2150-8097.

Xu:2010:EES

[408] Jia Xu, Zhenjie Zhang, Anthony K. H. Tung, and Ge Yu. Efficient and effective similarity search over probabilistic data based on Earth Mover's Distance. *Proceedings of the VLDB Endowment*, 3(1–2):758–769, September 2010. CODEN ???? ISSN 2150-8097.

Benedikt:2010:PXM

[409] Michael Benedikt, Evgeny Kharlamov, Dan Olteanu, and Pierre Senellart. Probabilistic XML via Markov Chains. *Proceedings of the VLDB Endowment*, 3(1–2):770–781, September 2010. CODEN ???? ISSN 2150-8097.

Arumugam:2010:MRR

[410] Subi Arumugam, Fei Xu, Ravi Jampani, Christopher Jermaine, Luis L. Perez, and Peter J. Haas. MCDB-R: risk analysis in the database. *Proceedings of the VLDB Endowment*, 3(1–2):782–793, September 2010. CODEN ???? ISSN 2150-8097.

Wick:2010:SPD

[411] Michael Wick, Andrew McCallum, and Gerome Miklau. Scalable probabilistic databases with factor graphs and MCMC. *Proceedings of the VLDB Endowment*, 3(1–2):794–804, September 2010. CODEN ???? ISSN 2150-8097.

Zhang:2010:MCF

[412] Meihui Zhang, Marios Hadjieleftheriou, Beng Chin Ooi, Cecilia M. Procopiuc, and Divesh Srivastava. On multi-column foreign key discovery. *Proceedings of the VLDB Endowment*, 3(1–2):805–814, September 2010. CODEN ???? ISSN 2150-8097.

Cheng:2010:EEE

[413] Reynold Cheng, Eric Lo, Xuan S. Yang, Ming-Hay Luk, Xiang Li, and Xike Xie. Explore or exploit?: effective strategies for disambiguating large databases. *Proceedings of the VLDB Endowment*, 3(1–2):815–825, September 2010. CODEN ???? ISSN 2150-8097.

Soliman:2010:BRM

[414] Mohamed A. Soliman, Ihab F. Ilyas, and Mina Saleeb. Building ranked mashups of unstructured sources with uncertain information. *Proceedings of the VLDB Endowment*, 3(1–2):826–837, September 2010. CODEN ???? ISSN 2150-8097.

Raissi:2010:CCS

[415] Chedy Raïssi, Jian Pei, and Thomas Kister. Computing closed skycubes. *Proceedings of the VLDB Endowment*, 3(1–2):838–847, September 2010. CODEN ???? ISSN 2150-8097.

Lo:2010:GDQ

[416] Eric Lo, Nick Cheng, and Wing-Kai Hon. Generating databases for query workloads. *Proceedings of the VLDB Endowment*, 3(1–2):848–859, September 2010. CODEN ???? ISSN 2150-8097.

Wu:2010:PTJ

[417] Minji Wu, Laure Berti-Équille, Amélie Marian, Cecilia M. Procopiuc, and Divesh Srivastava. Processing top-k join queries. *Proceedings of the VLDB Endowment*, 3(1–2):860–870, September 2010. CODEN ???? ISSN 2150-8097.

Martinez-Palau:2010:TWR

[418] Xavier Martinez-Palau, David Dominguez-Sal, and Josep Lluis Larriba-Pey. Two-way replacement selection. *Proceedings of the VLDB Endowment*, 3(1–2):871–881, September 2010. CODEN ???? ISSN 2150-8097.

Maneth:2010:XWQ

[419] Sebastian Maneth and Kim Nguyen. XPath whole query optimization. *Proceedings of the VLDB Endowment*, 3 (1–2):882–893, September 2010. CODEN ???? ISSN 2150-8097.

Grimsmo:2010:FOT

[420] Nils Grimsmo, Truls A. Bjørklund, and Magnus Lie Hetland. Fast optimal twig joins. *Proceedings of the VLDB Endowment*, 3(1–2):894–905, September 2010. CODEN ???? ISSN 2150-8097.

Benedikt:2010:DIX

[421] Michael Benedikt and James Cheney. Destabilizers and independence of XML updates. *Proceedings of the VLDB Endowment*, 3(1–2):906–917, September 2010. CODEN ???? ISSN 2150-8097.

Liu:2010:SWH

[422] Ziyang Liu, Qihong Shao, and Yi Chen. Searching workflows with hierarchical views. *Proceedings of the VLDB Endowment*, 3(1–2):918–927, September 2010. CODEN ???? ISSN 2150-8097.

Pandis:2010:DOT

[423] Ippokratis Pandis, Ryan Johnson, Nikos Hardavellas, and Anastasia Ailamaki. Data-oriented transaction execution. *Proceedings of the VLDB Endowment*, 3(1–2):928–939, September 2010. CODEN ???? ISSN 2150-8097.

Deutch:2010:OTQ

[424] Daniel Deutch, Tova Milo, Neoklis Polyzotis, and Tom Yam. Optimal top-k query evaluation for weighted business processes. *Proceedings of the VLDB Endowment*, 3(1–2):940–951, September 2010. CODEN ???? ISSN 2150-8097.

Wang:2010:BSM

[425] Guozhang Wang, Marcos Vaz Salles, Benjamin Sowell, Xun Wang, Tuan Cao, Alan Demers, Johannes Gehrke, and Walker White. Behavioral simulations in MapReduce. *Proceedings of the VLDB Endowment*, 3(1–2):952–963, September 2010. CODEN ???? ISSN 2150-8097.

Ge:2010:TSS

[426] Tingjian Ge and Stan Zdonik. A*-tree: a structure for storage and modeling of uncertain multidimensional arrays. *Proceedings of the VLDB Endowment*, 3(1–2):964–974, September 2010. CODEN ???? ISSN 2150-8097.

Aggarwal:2010:DPM

[427] Charu C. Aggarwal, Yao Li, Philip S. Yu, and Ruoming Jin. On dense pattern mining in graph streams. *Proceedings of the VLDB Endowment*, 3 (1–2):975–984, September 2010. CODEN ???? ISSN 2150-8097.

Yiu:2010:EPD

[428] Man Lung Yiu, Leong Hou U., Simonas Saltenis, and Kostas Tzoumas. Efficient proximity detection among mobile users via self-tuning policies. *Proceedings of the VLDB Endowment*, 3 (1–2):985–996, September 2010. CODEN ???? ISSN 2150-8097.

Potamias:2010:KNN

[429] Michalis Potamias, Francesco Bonchi, Aristides Gionis, and George Kollios. k-nearest neighbors in uncertain graphs. *Proceedings of the VLDB Endowment*, 3(1–2):997–1008, September 2010. CODEN ???? ISSN 2150-8097.

Cao:2010:MSS

[430] Xin Cao, Gao Cong, and Christian S. Jensen. Mining significant semantic locations from GPS data. *Proceedings of the VLDB Endowment*, 3(1–2):1009–1020, September 2010. CODEN ???? ISSN 2150-8097.

Hay:2010:BAD

[431] Michael Hay, Vibhor Rastogi, Gerome Miklau, and Dan Suciu. Boosting the accuracy of differentially private histograms through consistency. *Proceedings of the VLDB Endowment*, 3(1–2): 1021–1032, September 2010. CODEN ???? ISSN 2150-8097.

Cao:2010:UIP

[432] Jianneng Cao, Panagiotis Karras, Chedy Raïssi, and Kian-Lee Tan. ρ-uncertainty: inference-proof transaction anonymization. *Proceedings of the VLDB Endowment*, 3(1–2):1033–1044, September 2010. CODEN ???? ISSN 2150-8097.

Cormode:2010:MMM

[433] Graham Cormode, Divesh Srivastava, Ninghui Li, and Tiancheng Li. Minimizing minimality and maximizing utility: analyzing method-based attacks on anonymized data. *Proceedings of the VLDB Endowment*, 3(1–2):1045–1056, September 2010. CODEN ???? ISSN 2150-8097.

Wang:2010:QPI

[434] Daisy Zhe Wang, Michael J. Franklin, Minos Garofalakis, and Joseph M. Hellerstein. Querying probabilistic information extraction. *Proceedings of the VLDB Endowment*, 3(1–2):1057–1067, September 2010. CODEN ???? ISSN 2150-8097.

Sen:2010:ROF

[435] Prithviraj Sen, Amol Deshpande, and Lise Getoor. Read-once functions and query evaluation in probabilistic databases. *Proceedings of the VLDB Endowment*, 3(1–2):1068–1079, September 2010. CODEN ???? ISSN 2150-8097.

Agrawal:2010:FUD

[436] Parag Agrawal, Anish Das Sarma, Jeffrey Ullman, and Jennifer Widom. Foundations of uncertain-data integration. *Proceedings of the VLDB Endowment*, 3(1–2):1080–1090, September 2010. CODEN ???? ISSN 2150-8097.

Mathioudakis:2010:IAD

[437] Michael Mathioudakis, Nilesh Bansal, and Nick Koudas. Identifying, attributing and describing spatial bursts. *Proceedings of the VLDB Endowment*, 3 (1–2):1091–1102, September 2010. CODEN ???? ISSN 2150-8097.

Kimura:2010:CCA

[438] Hideaki Kimura, George Huo, Alexander Rasin, Samuel Madden, and Stanley B. Zdonik. CORADD: correlation aware database designer for materialized views and indexes. *Proceedings of the VLDB Endowment*, 3(1–2):1103–1113, September 2010. CODEN ???? ISSN 2150-8097.

Nanongkai:2010:RMR

[439] Danupon Nanongkai, Atish Das Sarma, Ashwin Lall, Richard J. Lipton, and Jun Xu. Regret-minimizing representative databases. *Proceedings of the VLDB Endowment*, 3(1–2):1114–1124, September 2010. CODEN ???? ISSN 2150-8097.

Arai:2010:ACA

[440] Benjamin Arai, Gautam Das, Dimitrios Gunopulos, Vagelis Hristidis, and Nick Koudas. An access cost-aware approach for object retrieval over multiple sources. *Proceedings of the VLDB Endowment*, 3(1–2):1125–1136, September 2010. CODEN ???? ISSN 2150-8097.

Abhirama:2010:SPC

[441] M. Abhirama, Sourjya Bhaumik, Atreyee Dey, Harsh Shrimal, and Jayant R. Haritsa. On the stability of plan costs and the costs of plan stability. *Proceedings of the VLDB Endowment*, 3(1–2):1137–1148, September 2010. CODEN ???? ISSN 2150-8097.

Herodotou:2010:XST

[442] Herodotos Herodotou and Shivnath Babu. Xplus: a SQL-tuning-aware query optimizer. *Proceedings of the VLDB Endowment*, 3(1–2):1149–1160, September 2010. CODEN ???? ISSN 2150-8097.

Fan:2010:GHR

[443] Wenfei Fan, Jianzhong Li, Shuai Ma, Hongzhi Wang, and Yinghui Wu. Graph homomorphism revisited for graph matching. *Proceedings of the VLDB Endowment*, 3(1–2):1161–1172, September 2010. CODEN ???? ISSN 2150-8097.

Kandhan:2010:SFS

[444] Ramakrishnan Kandhan, Nikhil Teletia, and Jignesh M. Patel. SigMatch: fast and scalable multi-pattern matching. *Proceedings of the VLDB Endowment*, 3(1–2):1173–1184, September 2010. CODEN ???? ISSN 2150-8097.

Zhang:2010:SSI

[445] Shijie Zhang, Jiong Yang, and Wei Jin. SAPPER: subgraph indexing and approximate matching in large graphs. *Proceedings of the VLDB Endowment*, 3(1–2):1185–1194, September 2010. CODEN ???? ISSN 2150-8097.

Li:2010:TIS

[446] Yinan Li, Bingsheng He, Robin Jun Yang, Qiong Luo, and Ke Yi. Tree indexing on solid state drives. *Proceedings of the VLDB Endowment*, 3(1–2): 1195–1206, September 2010. CODEN ???? ISSN 2150-8097.

Wu:2010:EBT

[447] Sai Wu, Dawei Jiang, Beng Chin Ooi, and Kun-Lung Wu. Efficient B-tree based indexing for cloud data processing. *Proceedings of the VLDB Endowment*, 3(1–2):1207–1218, September 2010. CODEN ???? ISSN 2150-8097.

Wang:2010:TJE

[448] Jiannan Wang, Jianhua Feng, and Guoliang Li. Trie-join: efficient trie-based string similarity joins with edit-distance constraints. *Proceedings of the VLDB Endowment*, 3(1–2):1219–1230,

September 2010. CODEN ???? ISSN 2150-8097.

Sharifzadeh:2010:VTR

[449] Mehdi Sharifzadeh and Cyrus Shahabi. VoR-tree: R-trees with Voronoi diagrams for efficient processing of spatial nearest neighbor queries. *Proceedings of the VLDB Endowment*, 3(1–2):1231–1242, September 2010. CODEN ???? ISSN 2150-8097.

Deepak:2010:ERR

[450] P. Deepak and Prasad M. Deshpande. Efficient RkNN retrieval with arbitrary non-metric similarity measures. *Proceedings of the VLDB Endowment*, 3 (1–2):1243–1254, September 2010. CODEN ???? ISSN 2150-8097.

Zhang:2010:ESE

[451] Shiming Zhang, Nikos Mamoulis, David W. Cheung, and Ben Kao. Efficient skyline evaluation over partially ordered domains. *Proceedings of the VLDB Endowment*, 3(1–2):1255–1266, September 2010. CODEN ???? ISSN 2150-8097.

Wei:2010:AHO

[452] Mingzhu Wei, Elke A. Rundensteiner, and Murali Mani. Achieving high output quality under limited resources through structure-based spilling in XML streams. *Proceedings of the VLDB Endowment*, 3(1–2):1267–1278, September 2010. CODEN ???? ISSN 2150-8097.

Mihaylov:2010:DJO

[453] Svilen R. Mihaylov, Marie Jacob, Zachary G. Ives, and Sudipto Guha. Dynamic join optimization in multi-hop wireless sensor networks. *Proceedings of the VLDB Endowment*, 3(1–2): 1279–1290, September 2010. CODEN ???? ISSN 2150-8097.

Akdere:2010:DSC

[454] Mert Akdere, Uğur Çetintemel, and Eli Upfal. Database-support for continuous prediction queries over streaming data. *Proceedings of the VLDB Endowment*, 3(1–2):1291–1301, September 2010. CODEN ???? ISSN 2150-8097.

Tran:2010:CAU

[455] Thanh T. L. Tran, Andrew McGregor, Yanlei Diao, Liping Peng, and Anna Liu. Conditioning and aggregating uncertain data streams: going beyond expectations. *Proceedings of the VLDB Endowment*, 3(1–2):1302–1313, September 2010. CODEN ???? ISSN 2150-8097.

Glavic:2010:TUB

[456] Boris Glavic, Gustavo Alonso, Renée J. Miller, and Laura M. Haas. TRAMP: understanding the behavior of schema mappings through provenance. *Proceedings of the VLDB Endowment*, 3 (1–2):1314–1325, September 2010. CODEN ???? ISSN 2150-8097.

Whang:2010:ERE

[457] Steven Euijong Whang and Hector Garcia-Molina. Entity resolution with evolving rules. *Proceedings of the VLDB Endowment*, 3(1–2):1326–1337, September 2010. CODEN ???? ISSN 2150-8097.

Limaye:2010:ASW

[458] Girija Limaye, Sunita Sarawagi, and Soumen Chakrabarti. Annotating and searching Web tables using entities, types and relationships. *Proceedings*

of the VLDB Endowment, 3(1–2):1338–1347, September 2010. CODEN ???? ISSN 2150-8097.

Bedathur:2010:IPM

[459] Srikanta Bedathur, Klaus Berberich, Jens Dittrich, Nikos Mamoulis, and Gerhard Weikum. Interesting-phrase mining for ad-hoc text analytics. *Proceedings of the VLDB Endowment*, 3 (1–2):1348–1357, September 2010. CODEN ???? ISSN 2150-8097.

Dong:2010:GDC

[460] Xin Luna Dong, Laure Berti-Equille, Yifan Hu, and Divesh Srivastava. Global detection of complex copying relationships between sources. *Proceedings of the VLDB Endowment*, 3(1–2): 1358–1369, September 2010. CODEN ???? ISSN 2150-8097.

DeCapitanidiVimercati:2010:FLA

[461] Sabrina De Capitani di Vimercati, Sara Foresti, Sushil Jajodia, Stefano Paraboschi, and Pierangela Samarati. Fragments and loose associations: respecting privacy in data publishing. *Proceedings of the VLDB Endowment*, 3(1–2): 1370–1381, September 2010. CODEN ???? ISSN 2150-8097.

Fusco:2010:NFF

[462] Francesco Fusco, Marc Ph. Stoecklin, and Michail Vlachos. NET-FLi: on-the-fly compression, archiving and indexing of streaming network traffic. *Proceedings of the VLDB Endowment*, 3(1–2):1382–1393, September 2010. CODEN ???? ISSN 2150-8097.

Zou:2010:SRQ

[463] Qiong Zou, Huayong Wang, Robert Soulé, Martin Hirzel, Henrique Andrade, Buğra Gedik, and Kun-Lung Wu. From a stream of relational queries to distributed stream processing. *Proceedings of the VLDB Endowment*, 3 (1–2):1394–1405, September 2010. CODEN ???? ISSN 2150-8097.

Mah:2010:UUA

[464] James T. L. Mah, Danny C. C. Poo, and Shaojiang Cai. UASMAs (universal automated SNP mapping algorithms): a set of algorithms to instantaneously map SNPs in real time to aid functional SNP discovery. *Proceedings of the VLDB Endowment*, 3(1–2):1406–1413, September 2010. CODEN ???? ISSN 2150-8097.

Debnath:2010:FHT

[465] Biplob Debnath, Sudipta Sengupta, and Jin Li. FlashStore: high throughput persistent key–value store. *Proceedings of the VLDB Endowment*, 3(1–2): 1414–1425, September 2010. CODEN ???? ISSN 2150-8097.

Xin:2010:MDA

[466] Reynold S. Xin, William McLaren, Patrick Dantressangle, Steve Schormann, Sam Lightstone, and Maria Schwenger. MEET DB2: automated database migration evaluation. *Proceedings of the VLDB Endowment*, 3 (1–2):1426–1434, September 2010. CODEN ???? ISSN 2150-8097.

Canim:2010:SBE

[467] Mustafa Canim, George A. Mihaila, Bishwaranjan Bhattacharjee, Kenneth A. Ross, and Christian A. Lang. SSD bufferpool extensions for database systems. *Proceedings of the VLDB Endowment*, 3(1–2):1435–1446, Septem-

ber 2010. CODEN ???? ISSN 2150-8097.

Loboz:2010:DWM

[468] Charles Loboz, Slawek Smyl, and Suman Nath. DataGarage: warehousing massive performance data on commodity servers. *Proceedings of the VLDB Endowment*, 3(1–2):1447–1458, September 2010. CODEN ???? ISSN 2150-8097.

Chen:2010:CHP

[469] Songting Chen. Cheetah: a high performance, custom data warehouse on top of MapReduce. *Proceedings of the VLDB Endowment*, 3(1–2):1459–1468, September 2010. CODEN ???? ISSN 2150-8097.

Orair:2010:DBO

[470] Gustavo H. Orair, Carlos H. C. Teixeira Wagner Meira, Jr., Ye Wang, and Srinivasan Parthasarathy. Distance-based outlier detection: consolidation and renewed bearing. *Proceedings of the VLDB Endowment*, 3(1–2):1469–1480, September 2010. CODEN ???? ISSN 2150-8097.

Kim:2010:ALM

[471] Young-Seok Kim, Heegyu Jin, and Kyoung-Gu Woo. Adaptive logging for mobile device. *Proceedings of the VLDB Endowment*, 3(1–2):1481–1492, September 2010. CODEN ???? ISSN 2150-8097.

Pesti:2010:RSL

[472] Peter Pesti, Ling Liu, Bhuvan Bamba, Arun Iyengar, and Matt Weber. RoadTrack: scaling location updates for mobile clients on road networks with query awareness. *Proceedings of the VLDB Endowment*, 3(1–2):1493–1504, September 2010. CODEN ???? ISSN 2150-8097.

Si:2010:CID

[473] Xiance Si, Edward Y. Chang, Zoltán Gyöngyi, and Maosong Sun. Confucius and its intelligent disciples: integrating social with search. *Proceedings of the VLDB Endowment*, 3(1–2):1505–1516, September 2010. CODEN ???? ISSN 2150-8097.

Haritsa:2010:PDQ

[474] Jayant R. Haritsa. The Picasso database query optimizer visualizer. *Proceedings of the VLDB Endowment*, 3(1–2):1517–1520, September 2010. CODEN ???? ISSN 2150-8097.

Liu:2010:CED

[475] Ziyang Liu, Sivaramakrishnan Natarajan, Bin He, Hui-I Hsiao, and Yi Chen. CODS: evolving data efficiently and scalably in column oriented databases. *Proceedings of the VLDB Endowment*, 3(1–2):1521–1524, September 2010. CODEN ???? ISSN 2150-8097.

Sadoghi:2010:EEP

[476] Mohammad Sadoghi, Martin Labrecque, Harsh Singh, Warren Shum, and Hans-Arno Jacobsen. Efficient event processing through reconfigurable hardware for algorithmic trading. *Proceedings of the VLDB Endowment*, 3(1–2):1525–1528, September 2010. CODEN ???? ISSN 2150-8097.

Levandoski:2010:CCP

[477] Justin J. Levandoski, Mohamed F. Mokbel, and Mohamed E. Khalefa. CareDB: a context and preference-aware location-based database sys-

tem. *Proceedings of the VLDB Endowment*, 3(1–2):1529–1532, September 2010. CODEN ???? ISSN 2150-8097.

Kossmann:2010:CMC

[478] Donald Kossmann, Tim Kraska, Simon Loesing, Stephan Merkli, Raman Mittal, and Flavio Pfaffhauser. Cloudy: a modular cloud storage system. *Proceedings of the VLDB Endowment*, 3(1–2): 1533–1536, September 2010. CODEN ???? ISSN 2150-8097.

Kazemitabar:2010:GSQ

[479] Seyed Jalal Kazemitabar, Ugur Demiryurek, Mohamed Ali, Afsin Akdogan, and Cyrus Shahabi. Geospatial stream query processing using Microsoft SQL Server StreamInsight. *Proceedings of the VLDB Endowment*, 3 (1–2):1537–1540, September 2010. CODEN ???? ISSN 2150-8097.

Dyreson:2010:UXT

[480] Curtis E. Dyreson, Sourav S. Bhowmick, and Kirankanth Mallampalli. Using XMorph to transform XML data. *Proceedings of the VLDB Endowment*, 3 (1–2):1541–1544, September 2010. CODEN ???? ISSN 2150-8097.

Wang:2010:ACE

[481] Di Wang, Elke A. Rundensteiner, Han Wang, and Richard T. Ellison III. Active complex event processing: applications in real-time health care. *Proceedings of the VLDB Endowment*, 3(1–2): 1545–1548, September 2010. CODEN ???? ISSN 2150-8097.

Schreiber:2010:TNP

[482] Tom Schreiber, Simone Bonetti, Torsten Grust, Manuel Mayr, and Jan Rittinger. Thirteen new players in the team: a FERRY-based LINQ to SQL provider. *Proceedings of the VLDB Endowment*, 3(1–2):1549–1552, September 2010. CODEN ???? ISSN 2150-8097.

Abiteboul:2010:AEC

[483] Serge Abiteboul, Pierre Bourhis, Bogdan Marinoiu, and Alban Galland. AXART: enabling collaborative work with AXML artifacts. *Proceedings of the VLDB Endowment*, 3(1–2):1553–1556, September 2010. CODEN ???? ISSN 2150-8097.

McConnell:2010:IAF

[484] Christopher McConnell, Fan Ping, and Jeong-Hyon Hwang. iFlow: an approach for fast and reliable Internet-scale stream processing utilizing detouring and replication. *Proceedings of the VLDB Endowment*, 3(1–2):1557–1560, September 2010. CODEN ???? ISSN 2150-8097.

Kantere:2010:PCT

[485] Verena Kantere, Maher Manoubi, Iluju Kiringa, Timos Sellis, and John Mylopoulos. Peer coordination through distributed triggers. *Proceedings of the VLDB Endowment*, 3(1–2):1561–1564, September 2010. CODEN ???? ISSN 2150-8097.

Wu:2010:SSY

[486] Hao Wu, Guoliang Li, Chen Li, and Lizhu Zhou. Seaform: search-as-you-type in forms. *Proceedings of the VLDB Endowment*, 3(1–2):1565–1568, September 2010. CODEN ???? ISSN 2150-8097.

Strotgen:2010:TSE

[487] Jannik Strötgen and Michael Gertz. TimeTrails: a system for exploring spatio-temporal information in documents. *Proceedings of the VLDB Endowment*, 3(1–2):1569–1572, September 2010. CODEN ???? ISSN 2150-8097.

Pound:2010:QEF

[488] Jeffrey Pound, Ihab F. Ilyas, and Grant Weddell. QUICK: expressive and flexible search over knowledge bases and text collections. *Proceedings of the VLDB Endowment*, 3(1–2):1573–1576, September 2010. CODEN ???? ISSN 2150-8097.

Kwietniewski:2010:TXD

[489] Marcin Kwietniewski, Jarek Gryz, Stephanie Hazlewood, and Paul Van Run. Transforming XML documents as schemas evolve. *Proceedings of the VLDB Endowment*, 3(1–2):1577–1580, September 2010. CODEN ???? ISSN 2150-8097.

Liu:2010:XCT

[490] Ziyang Liu, Sivaramakrishnan Natarajan, Peng Sun, Stephen Booher, Tim Meehan, Robert Winkler, and Yi Chen. XSACT: a comparison tool for structured search results. *Proceedings of the VLDB Endowment*, 3(1–2):1581–1584, September 2010. CODEN ???? ISSN 2150-8097.

Abdessalem:2010:OLT

[491] Talel Abdessalem, Bogdan Cautis, and Nora Derouiche. ObjectRunner: lightweight, targeted extraction and querying of structured Web data. *Proceedings of the VLDB Endowment*, 3 (1–2):1585–1588, September 2010. CODEN ???? ISSN 2150-8097.

Elbassuoni:2010:RRW

[492] Shady Elbassuoni, Katja Hose, Steffen Metzger, and Ralf Schenkel. ROXXI: Reviving witness dOcuments to eXplore eXtracted Information. *Proceedings of the VLDB Endowment*, 3(1–2): 1589–1592, September 2010. CODEN ???? ISSN 2150-8097.

Termehchy:2010:EUD

[493] Arash Termehchy and Marianne Winslett. EXTRUCT: using deep structural information in XML keyword search. *Proceedings of the VLDB Endowment*, 3(1–2):1593–1596, September 2010. CODEN ???? ISSN 2150-8097.

Akbarnejad:2010:SQR

[494] Javad Akbarnejad, Gloria Chatzopoulou, Magdalini Eirinaki, Suju Koshy, Sarika Mittal, Duc On, Neoklis Polyzotis, and Jothi S. Vindhiya Varman. SQL QueRIE recommendations. *Proceedings of the VLDB Endowment*, 3(1–2):1597–1600, September 2010. CODEN ???? ISSN 2150-8097.

Ang:2010:PCM

[495] Hock Hee Ang, Vivekanand Gopalkrishnan, Wee Keong Ng, and Steven C. H. Hoi. P2PDocTagger: content management through automated P2P collaborative tagging. *Proceedings of the VLDB Endowment*, 3(1–2):1601–1604, September 2010. CODEN ???? ISSN 2150-8097.

Setty:2010:IEI

[496] Vinay Setty, Srikanta Bedathur, Klaus Berberich, and Gerhard Weikum.

InZeit: efficiently identifying insightful time points. *Proceedings of the VLDB Endowment*, 3(1–2):1605–1608, September 2010. CODEN ???? ISSN 2150-8097.

Sun:2010:IIT

[497] Aixin Sun, Sourav S. Bhowmick, and Yao Liu. iAVATAR: an interactive tool for finding and visualizing visual-representative tags in image search. *Proceedings of the VLDB Endowment*, 3(1–2):1609–1612, September 2010. CODEN ???? ISSN 2150-8097.

Kabisch:2010:DWI

[498] Thomas Kabisch, Eduard C. Dragut, Clement Yu, and Ulf Leser. Deep Web integration with VisQI. *Proceedings of the VLDB Endowment*, 3(1–2):1613–1616, September 2010. CODEN ???? ISSN 2150-8097.

Dong:2010:SST

[499] Xin Luna Dong, Laure Berti-Equille, Yifan Hu, and Divesh Srivastava. SOLOMON: seeking the truth via copying detection. *Proceedings of the VLDB Endowment*, 3(1–2):1617–1620, September 2010. CODEN ???? ISSN 2150-8097.

Hentschel:2010:JTD

[500] Martin Hentschel, Laura Haas, and Renée J. Miller. Just-in-time data integration in action. *Proceedings of the VLDB Endowment*, 3(1–2):1621–1624, September 2010. CODEN ???? ISSN 2150-8097.

Alexandrov:2010:MPD

[501] Alexander Alexandrov, Max Heimel, Volker Markl, Dominic Battré, Fabian Hueske, Erik Nijkamp, Stephan Ewen, Odej Kao, and Daniel Warneke. Massively parallel data analysis with PACTs on Nephele. *Proceedings of the VLDB Endowment*, 3(1–2):1625–1628, September 2010. CODEN ???? ISSN 2150-8097.

Middelfart:2010:UST

[502] Morten Middelfart and Torben Bach Pedersen. Using sentinel technology in the TARGIT BI suite. *Proceedings of the VLDB Endowment*, 3(1–2):1629–1632, September 2010. CODEN ???? ISSN 2150-8097.

Gunnemann:2010:CIC

[503] Stephan Günnemann, Ines Färber, Hardy Kremer, and Thomas Seidl. CoDA: interactive cluster based concept discovery. *Proceedings of the VLDB Endowment*, 3(1–2):1633–1636, September 2010. CODEN ???? ISSN 2150-8097.

Bergamaschi:2010:KSK

[504] Sonia Bergamaschi, Elton Domnori, Francesco Guerra, Mirko Orsini, Raquel Trillo Lado, and Yannis Velegrakis. Keymantic: semantic keyword-based searching in data integration systems. *Proceedings of the VLDB Endowment*, 3(1–2):1637–1640, September 2010. CODEN ???? ISSN 2150-8097.

Golab:2010:DAE

[505] Lukasz Golab, Howard Karloff, Flip Korn, and Divesh Srivastava. Data Auditor: exploring data quality and semantics using pattern tableaux. *Proceedings of the VLDB Endowment*, 3(1–2):1641–1644, September 2010. CODEN ???? ISSN 2150-8097.

Nori:2010:DCP

[506] Anil K. Nori. Distributed caching platforms. *Proceedings of the VLDB Endowment*, 3(1–2):1645–1646, September 2010. CODEN ???? ISSN 2150-8097.

Agrawal:2010:BDC

[507] Divyakant Agrawal, Sudipto Das, and Amr El Abbadi. Big data and cloud computing: new wine or just new bottles? *Proceedings of the VLDB Endowment*, 3(1–2):1647–1648, September 2010. CODEN ???? ISSN 2150-8097.

Samet:2010:TSS

[508] Hanan Samet. Techniques for similarity searching in multimedia databases. *Proceedings of the VLDB Endowment*, 3(1–2):1649–1650, September 2010. CODEN ???? ISSN 2150-8097.

Etzion:2010:EPP

[509] Opher Etzion. Event processing: past, present and future. *Proceedings of the VLDB Endowment*, 3(1–2):1651–1652, September 2010. CODEN ???? ISSN 2150-8097.

Renz:2010:SSM

[510] Matthias Renz, Reynold Cheng, and Hans-Peter Kriegel. Similarity search and mining in uncertain databases. *Proceedings of the VLDB Endowment*, 3(1–2):1653–1654, September 2010. CODEN ???? ISSN 2150-8097.

Muthukrishnan:2010:DMM

[511] S. Muthukrishnan. Data management and mining in Internet AD systems. *Proceedings of the VLDB Endowment*, 3(1–2):1655–1656, September 2010. CODEN ???? ISSN 2150-8097.

Kling:2010:GEE

[512] Patrick Kling, M. Tamer Özsu, and Khuzaima Daudjee. Generating efficient execution plans for vertically partitioned XML databases. *Proceedings of the VLDB Endowment*, 4(1):1–11, October 2010. CODEN ???? ISSN 2150-8097.

Lian:2010:GFH

[513] Xiang Lian and Lei Chen. A generic framework for handling uncertain data with local correlations. *Proceedings of the VLDB Endowment*, 4(1):12–21, October 2010. CODEN ???? ISSN 2150-8097.

Khoussainova:2010:SCA

[514] Nodira Khoussainova, YongChul Kwon, Magdalena Balazinska, and Dan Suciu. SnipSuggest: context-aware autocompletion for SQL. *Proceedings of the VLDB Endowment*, 4(1):22–33, October 2010. CODEN ???? ISSN 2150-8097.

Meliou:2010:CCR

[515] Alexandra Meliou, Wolfgang Gatterbauer, Katherine F. Moore, and Dan Suciu. The complexity of causality and responsibility for query answers and non-answers. *Proceedings of the VLDB Endowment*, 4(1):34–45, October 2010. CODEN ???? ISSN 2150-8097.

Sagy:2010:DTQ

[516] Guy Sagy, Daniel Keren, Izchak Sharfman, and Assaf Schuster. Distributed threshold querying of general functions by a difference of monotonic representation. *Proceedings of the VLDB En-

dowment, 4(2):46–57, November 2010. CODEN ???? ISSN 2150-8097.

Wang:2010:TBD

[517] Nan Wang, Jingbo Zhang, Kian-Lee Tan, and Anthony K. H. Tung. On triangulation-based dense neighborhood graph discovery. *Proceedings of the VLDB Endowment*, 4(2):58–68, November 2010. CODEN ???? ISSN 2150-8097.

Rice:2010:GIR

[518] Michael Rice and Vassilis J. Tsotras. Graph indexing of road networks for shortest path queries with label restrictions. *Proceedings of the VLDB Endowment*, 4(2):69–80, November 2010. CODEN ???? ISSN 2150-8097.

Qian:2010:CUF

[519] Li Qian, Kristen LeFevre, and H. V. Jagadish. CRIUS: user-friendly database design. *Proceedings of the VLDB Endowment*, 4(2):81–92, November 2010. CODEN ???? ISSN 2150-8097.

Rocha-Junior:2010:EPT

[520] João B. Rocha-Junior, Akrivi Vlachou, Christos Doulkeridis, and Kjetil Nørvåg. Efficient processing of top-k spatial preference queries. *Proceedings of the VLDB Endowment*, 4(2):93–104, November 2010. CODEN ???? ISSN 2150-8097.

Grund:2010:HMM

[521] Martin Grund, Jens Krüger, Hasso Plattner, Alexander Zeier, Philippe Cudre-Mauroux, and Samuel Madden. HYRISE: a main memory hybrid storage engine. *Proceedings of the VLDB Endowment*, 4(2):105–116, November 2010. CODEN ???? ISSN 2150-8097.

Curino:2010:URI

[522] Carlo A. Curino, Hyun Jin Moon, Alin Deutsch, and Carlo Zaniolo. Update rewriting and integrity constraint maintenance in a schema evolution support system: PRISM++. *Proceedings of the VLDB Endowment*, 4(2):117–128, November 2010. CODEN ???? ISSN 2150-8097.

Oro:2010:SEX

[523] Ermelinda Oro, Massimo Ruffolo, and Steffen Staab. SXPath: extending XPath towards spatial querying on Web documents. *Proceedings of the VLDB Endowment*, 4(2):129–140, November 2010. CODEN ???? ISSN 2150-8097.

Yuan:2010:PPP

[524] Mingxuan Yuan, Lei Chen, and Philip S. Yu. Personalized privacy protection in social networks. *Proceedings of the VLDB Endowment*, 4(2):141–150, November 2010. CODEN ???? ISSN 2150-8097.

Toda:2010:PAA

[525] Guilherme A. Toda, Eli Cortez, Altigran S. da Silva, and Edleno de Moura. A probabilistic approach for automatically filling form-based Web interfaces. *Proceedings of the VLDB Endowment*, 4(3):151–160, December 2010. CODEN ???? ISSN 2150-8097.

Papadimitriou:2010:OUB

[526] Panagiotis Papadimitriou, Hector Garcia-Molina, Ali Dasdan, and Santanu Kolay. Output URL bidding. *Proceedings of the VLDB Endowment*, 4(3):161–172, December 2010. CODEN ???? ISSN 2150-8097.

Bahmani:2010:FIP

[527] Bahman Bahmani, Abdur Chowdhury, and Ashish Goel. Fast incremental and personalized PageRank. *Proceedings of the VLDB Endowment*, 4(3):173–184, December 2010. CODEN ???? ISSN 2150-8097.

Lee:2010:QES

[528] Jongwuk Lee and Seung won Hwang. QSkycube: efficient skycube computation using point-based space partitioning. *Proceedings of the VLDB Endowment*, 4(3):185–196, December 2010. CODEN ???? ISSN 2150-8097.

Liu:2010:ZEI

[529] Bin Liu and Chee-Yong Chan. ZINC: efficient indexing for skyline computation. *Proceedings of the VLDB Endowment*, 4(3):197–207, December 2010. CODEN ???? ISSN 2150-8097.

Rastogi:2011:LSC

[530] Vibhor Rastogi, Nilesh Dalvi, and Minos Garofalakis. Large-scale collective entity matching. *Proceedings of the VLDB Endowment*, 4(4):208–218, January 2011. CODEN ???? ISSN 2150-8097.

Dalvi:2011:AWL

[531] Nilesh Dalvi, Ravi Kumar, and Mohamed Soliman. Automatic wrappers for large scale Web extraction. *Proceedings of the VLDB Endowment*, 4 (4):219–230, January 2011. CODEN ???? ISSN 2150-8097.

Yang:2011:FSM

[532] Xintian Yang, Srinivasan Parthasarathy, and P. Sadayappan. Fast sparse matrix-vector multiplication on GPUs: implications for graph mining. *Proceedings of the VLDB Endowment*, 4(4): 231–242, January 2011. CODEN ???? ISSN 2150-8097.

Rao:2011:UPB

[533] Jun Rao, Eugene J. Shekita, and Sandeep Tata. Using Paxos to build a scalable, consistent, and highly available datastore. *Proceedings of the VLDB Endowment*, 4(4):243–254, January 2011. CODEN ???? ISSN 2150-8097.

Ding:2011:FSI

[534] Bolin Ding and Arnd Christian König. Fast set intersection in memory. *Proceedings of the VLDB Endowment*, 4 (4):255–266, January 2011. CODEN ???? ISSN 2150-8097.

Parameswaran:2011:HAG

[535] Aditya Parameswaran, Anish Das Sarma, Hector Garcia-Molina, Neoklis Polyzotis, and Jennifer Widom. Human-assisted graph search: it's okay to ask questions. *Proceedings of the VLDB Endowment*, 4(5):267–278, February 2011. CODEN ???? ISSN 2150-8097.

Yakout:2011:GDR

[536] Mohamed Yakout, Ahmed K. Elmagarmid, Jennifer Neville, Mourad Ouzzani, and Ihab F. Ilyas. Guided data repair. *Proceedings of the VLDB Endowment*, 4(5):279–289, February 2011. CODEN ???? ISSN 2150-8097.

Venetis:2011:HLD

[537] Petros Venetis, Hector Gonzalez, Christian S. Jensen, and Alon Halevy. Hyper-local, directions-based ranking

of places. *Proceedings of the VLDB Endowment*, 4(5):290–301, February 2011. CODEN ???? ISSN 2150-8097.

Koc:2011:IMC

[538] M. Levent Koc and Christopher Ré. Incrementally maintaining classification using an RDBMS. *Proceedings of the VLDB Endowment*, 4(5):302–313, February 2011. CODEN ???? ISSN 2150-8097.

He:2011:HTT

[539] Bingsheng He and Jeffrey Xu Yu. High-throughput transaction executions on graphics processors. *Proceedings of the VLDB Endowment*, 4(5):314–325, February 2011. CODEN ???? ISSN 2150-8097.

Cao:2011:DIQ

[540] Zhao Cao, Charles Sutton, Yanlei Diao, and Prashant Shenoy. Distributed inference and query processing for RFID tracking and monitoring. *Proceedings of the VLDB Endowment*, 4(5):326–337, February 2011. CODEN ???? ISSN 2150-8097.

Lee:2011:SJS

[541] Hongrae Lee, Raymond T. Ng, and Kyuseok Shim. Similarity join size estimation using locality sensitive hashing. *Proceedings of the VLDB Endowment*, 4(6):338–349, March 2011. CODEN ???? ISSN 2150-8097.

Liu:2011:QEB

[542] Ziyang Liu, Sivaramakrishnan Natarajan, and Yi Chen. Query expansion based on clustered results. *Proceedings of the VLDB Endowment*, 4(6):350–361, March 2011. CODEN ???? ISSN 2150-8097.

Dash:2011:CSP

[543] Debabrata Dash, Neoklis Polyzotis, and Anastasia Ailamaki. CoPhy: a scalable, portable, and interactive index advisor for large workloads. *Proceedings of the VLDB Endowment*, 4(6):362–372, March 2011. CODEN ???? ISSN 2150-8097.

Niu:2011:TSS

[544] Feng Niu, Christopher Ré, AnHai Doan, and Jude Shavlik. Tuffy: scaling up statistical inference in Markov logic networks using an RDBMS. *Proceedings of the VLDB Endowment*, 4(6):373–384, March 2011. CODEN ???? ISSN 2150-8097.

Jahani:2011:AOM

[545] Eaman Jahani, Michael J. Cafarella, and Christopher Ré. Automatic optimization for MapReduce programs. *Proceedings of the VLDB Endowment*, 4(6):385–396, March 2011. CODEN ???? ISSN 2150-8097.

Yang:2011:STG

[546] De-Nian Yang, Yi-Ling Chen, Wang-Chien Lee, and Ming-Syan Chen. On social-temporal group query with acquaintance constraint. *Proceedings of the VLDB Endowment*, 4(6):397–408, March 2011. CODEN ???? ISSN 2150-8097.

Nguyen:2011:SPO

[547] Hoa Nguyen, Ariel Fuxman, Stelios Paparizos, Juliana Freire, and Rakesh Agrawal. Synthesizing products for online catalogs. *Proceedings of the VLDB Endowment*, 4(7):409–418, April 2011. CODEN ???? ISSN 2150-8097.

Floratou:2011:COS

[548] Avrilia Floratou, Jignesh M. Patel, Eugene J. Shekita, and Sandeep Tata. Column-oriented storage techniques for MapReduce. *Proceedings of the VLDB Endowment*, 4(7):419–429, April 2011. CODEN ???? ISSN 2150-8097.

Lomet:2011:IPC

[549] David Lomet, Kostas Tzoumas, and Michael Zwilling. Implementing performance competitive logical recovery. *Proceedings of the VLDB Endowment*, 4(7):430–439, April 2011. CODEN ???? ISSN 2150-8097.

Machanavajjhala:2011:PSR

[550] Ashwin Machanavajjhala, Aleksandra Korolova, and Atish Das Sarma. Personalized social recommendations: accurate or private. *Proceedings of the VLDB Endowment*, 4(7):440–450, April 2011. CODEN ???? ISSN 2150-8097.

Capannini:2011:EDW

[551] Gabriele Capannini, Franco Maria Nardini, Raffaele Perego, and Fabrizio Silvestri. Efficient diversification of Web search results. *Proceedings of the VLDB Endowment*, 4(7):451–459, April 2011. CODEN ???? ISSN 2150-8097.

DeFrancisciMorales:2011:SCM

[552] Gianmarco De Francisci Morales, Aristides Gionis, and Mauro Sozio. Social content matching in MapReduce. *Proceedings of the VLDB Endowment*, 4 (7):460–469, April 2011. CODEN ???? ISSN 2150-8097.

Ao:2011:EPL

[553] Naiyong Ao, Fan Zhang, Di Wu, Douglas S. Stones, Gang Wang, Xiaoguang Liu, Jing Liu, and Sheng Lin. Efficient parallel lists intersection and index compression algorithms using graphics processing units. *Proceedings of the VLDB Endowment*, 4(8):470–481, May 2011. CODEN ???? ISSN 2150-8097.

Zou:2011:GAS

[554] Lei Zou, Jinghui Mo, Lei Chen, M. Tamer Özsu, and Dongyan Zhao. gStore: answering SPARQL queries via subgraph matching. *Proceedings of the VLDB Endowment*, 4(8):482–493, May 2011. CODEN ???? ISSN 2150-8097.

Das:2011:ALE

[555] Sudipto Das, Shoji Nishimura, Divyakant Agrawal, and Amr El Abbadi. Albatross: lightweight elasticity in shared storage databases for the cloud using live data migration. *Proceedings of the VLDB Endowment*, 4 (8):494–505, May 2011. CODEN ???? ISSN 2150-8097.

Nutanong:2011:IHD

[556] Sarana Nutanong, Edwin H. Jacox, and Hanan Samet. An incremental Hausdorff distance calculation algorithm. *Proceedings of the VLDB Endowment*, 4(8):506–517, May 2011. CODEN ???? ISSN 2150-8097.

Blaustein:2011:SPP

[557] Barbara Blaustein, Adriane Chapman, Len Seligman, M. David Allen, and Arnon Rosenthal. Surrogate parenthood: protected and informative graphs. *Proceedings of the VLDB Endowment*, 4(8):518–525, May 2011. CODEN ???? ISSN 2150-8097.

Venetis:2011:RST

[558] Petros Venetis, Alon Halevy, Jayant Madhavan, Marius Pasca, Warren Shen, Fei Wu, Gengxin Miao, and Chung Wu. Recovering semantics of tables on the web. *Proceedings of the VLDB Endowment*, 4(9):528–538, June 2011. CODEN ???? ISSN 2150-8097.

Neumann:2011:ECE

[559] Thomas Neumann. Efficiently compiling efficient query plans for modern hardware. *Proceedings of the VLDB Endowment*, 4(9):539–550, June 2011. CODEN ???? ISSN 2150-8097.

Jin:2011:DCR

[560] Ruoming Jin, Lin Liu, Bolin Ding, and Haixun Wang. Distance-constraint reachability computation in uncertain graphs. *Proceedings of the VLDB Endowment*, 4(9):551–562, June 2011. CODEN ???? ISSN 2150-8097.

Chi:2011:IIC

[561] Yun Chi, Hyun Jin Moon, and Hakan Hacigümüs. iCBS: incremental cost-based scheduling under piecewise linear SLAs. *Proceedings of the VLDB Endowment*, 4(9):563–574, June 2011. CODEN ???? ISSN 2150-8097.

Eltabakh:2011:CFD

[562] Mohamed Y. Eltabakh, Yuanyuan Tian, Fatma Özcan, Rainer Gemulla, Aljoscha Krettek, and John McPherson. CoHadoop: flexible data placement and its exploitation in Hadoop. *Proceedings of the VLDB Endowment*, 4(9):575–585, June 2011. CODEN ???? ISSN 2150-8097.

Idreos:2011:MWC

[563] Stratos Idreos, Stefan Manegold, Harumi Kuno, and Goetz Graefe. Merging what's cracked, cracking what's merged: adaptive indexing in main-memory column-stores. *Proceedings of the VLDB Endowment*, 4(9): 586–597, June 2011. CODEN ???? ISSN 2150-8097.

Wang:2011:PTR

[564] Chonghai Wang, Li Yan Yuan, Jia-Huai You, Osmar R. Zaiane, and Jian Pei. On pruning for top-k ranking in uncertain databases. *Proceedings of the VLDB Endowment*, 4(10):598–609, July 2011. CODEN ???? ISSN 2150-8097.

Pandis:2011:PPL

[565] Ippokratis Pandis, Pinar Tözün, Ryan Johnson, and Anastasia Ailamaki. PLP: page latch-free shared-everything OLTP. *Proceedings of the VLDB Endowment*, 4(10):610–621, July 2011. CODEN ???? ISSN 2150-8097.

Wang:2011:EMH

[566] Jiannan Wang, Guoliang Li, Jeffrey Xu Yu, and Jianhua Feng. Entity matching: how similar is similar. *Proceedings of the VLDB Endowment*, 4(10):622–633, July 2011. CODEN ???? ISSN 2150-8097.

Wang:2011:ACE

[567] Di Wang, Elke A. Rundensteiner, and Richard T. Ellison III. Active complex event processing over event streams. *Proceedings of the VLDB Endowment*, 4(10):634–645, July 2011. CODEN ???? ISSN 2150-8097.

Budak:2011:STA

[568] Ceren Budak, Divyakant Agrawal, and Amr El Abbadi. Structural trend analysis for online social networks. *Proceedings of the VLDB Endowment*, 4 (10):646–656, July 2011. CODEN ???? ISSN 2150-8097.

Kimura:2011:CAP

[569] Hideaki Kimura, Vivek Narasayya, and Manoj Syamala. Compression aware physical database design. *Proceedings of the VLDB Endowment*, 4(10):657–668, July 2011. CODEN ???? ISSN 2150-8097.

Bernecker:2011:EPR

[570] Thomas Bernecker, Tobias Emrich, Hans-Peter Kriegel, Matthias Renz, Stefan Zankl, and Andreas Züfle. Efficient probabilistic reverse nearest neighbor query processing on uncertain data. *Proceedings of the VLDB Endowment*, 4(10):669–680, July 2011. CODEN ???? ISSN 2150-8097.

Kargar:2011:KSG

[571] Mehdi Kargar and Aijun An. Keyword search in graphs: finding r-cliques. *Proceedings of the VLDB Endowment*, 4(10):681–692, July 2011. CODEN ???? ISSN 2150-8097.

Fabbri:2011:EBA

[572] Daniel Fabbri and Kristen LeFevre. Explanation-based auditing. *Proceedings of the VLDB Endowment*, 5(1): 1–12, September 2011. CODEN ???? ISSN 2150-8097.

Marcus:2011:HPS

[573] Adam Marcus, Eugene Wu, David Karger, Samuel Madden, and Robert Miller. Human-powered sorts and joins. *Proceedings of the VLDB Endowment*, 5(1):13–24, September 2011. CODEN ???? ISSN 2150-8097.

Cormode:2011:VCS

[574] Graham Cormode, Justin Thaler, and Ke Yi. Verifying computations with streaming interactive proofs. *Proceedings of the VLDB Endowment*, 5(1): 25–36, September 2011. CODEN ???? ISSN 2150-8097.

Lin:2011:MOI

[575] Dan Lin, Christian S. Jensen, Rui Zhang, Lu Xiao, and Jiaheng Lu. A moving-object index for efficient query processing with peer-wise location privacy. *Proceedings of the VLDB Endowment*, 5(1):37–48, September 2011. CODEN ???? ISSN 2150-8097.

Mansour:2011:EES

[576] Essam Mansour, Amin Allam, Spiros Skiadopoulos, and Panos Kalnis. ERA: efficient serial and parallel suffix tree construction for very long strings. *Proceedings of the VLDB Endowment*, 5 (1):49–60, September 2011. CODEN ???? ISSN 2150-8097.

Krueger:2011:FUR

[577] Jens Krueger, Changkyu Kim, Martin Grund, Nadathur Satish, David Schwalb, Jatin Chhugani, Hasso Plattner, Pradeep Dubey, and Alexander Zeier. Fast updates on read-optimized databases using multi-core CPUs. *Proceedings of the VLDB Endowment*, 5 (1):61–72, September 2011. CODEN ???? ISSN 2150-8097.

Goyal:2011:DBA

[578] Amit Goyal, Francesco Bonchi, and Laks V. S. Lakshmanan. A data-based

approach to social influence maximization. *Proceedings of the VLDB Endowment*, 5(1):73–84, September 2011. CODEN ???? ISSN 2150-8097.

Pavlo:2011:PMO

[579] Andrew Pavlo, Evan P. C. Jones, and Stanley Zdonik. On predictive modeling for optimizing transaction execution in parallel OLTP systems. *Proceedings of the VLDB Endowment*, 5(2):85–96, October 2011. CODEN ???? ISSN 2150-8097.

Goasdoue:2011:VSS

[580] François Goasdoué, Konstantinos Karanasos, Julien Leblay, and Ioana Manolescu. View selection in Semantic Web databases. *Proceedings of the VLDB Endowment*, 5(2):97–108, October 2011. CODEN ???? ISSN 2150-8097.

Jestes:2011:BWH

[581] Jeffrey Jestes, Ke Yi, and Feifei Li. Building wavelet histograms on large data in MapReduce. *Proceedings of the VLDB Endowment*, 5(2):109–120, October 2011. CODEN ???? ISSN 2150-8097.

Yang:2011:SMD

[582] Di Yang, Elke A. Rundensteiner, and Matthew O. Ward. Summarization and matching of density-based clusters in streaming environments. *Proceedings of the VLDB Endowment*, 5(2):121–132, October 2011. CODEN ???? ISSN 2150-8097.

Nguyen:2011:MSM

[583] Thanh Nguyen, Viviane Moreira, Huong Nguyen, Hoa Nguyen, and Juliana Freire. Multilingual schema matching for Wikipedia infoboxes. *Proceedings of the VLDB Endowment*, 5(2):133–144, October 2011. CODEN ???? ISSN 2150-8097.

Liu:2011:CFP

[584] Guimei Liu, Haojun Zhang, and Limsoon Wong. Controlling false positives in association rule mining. *Proceedings of the VLDB Endowment*, 5(2):145–156, October 2011. CODEN ???? ISSN 2150-8097.

Suchanek:2011:PPA

[585] Fabian M. Suchanek, Serge Abiteboul, and Pierre Senellart. PARIS: probabilistic alignment of relations, instances, and schema. *Proceedings of the VLDB Endowment*, 5(3):157–168, November 2011. CODEN ???? ISSN 2150-8097.

Ranu:2011:ATQ

[586] Sayan Ranu and Ambuj K. Singh. Answering top-k queries over a mixture of attractive and repulsive dimensions. *Proceedings of the VLDB Endowment*, 5(3):169–180, November 2011. CODEN ???? ISSN 2150-8097.

Armbrust:2011:PST

[587] Michael Armbrust, Kristal Curtis, Tim Kraska, Armando Fox, Michael J. Franklin, and David A. Patterson. PIQL: success-tolerant query processing in the cloud. *Proceedings of the VLDB Endowment*, 5(3):181–192, November 2011. CODEN ???? ISSN 2150-8097.

Zhao:2011:GQE

[588] Peixiang Zhao, Charu C. Aggarwal, and Min Wang. gSketch: on query estimation in graph streams. *Proceedings*

of the VLDB Endowment, 5(3):193–204, November 2011. CODEN ???? ISSN 2150-8097.

Ruttenberg:2011:IEM

[589] Brian E. Ruttenberg and Ambuj K. Singh. Indexing the earth mover's distance using normal distributions. *Proceedings of the VLDB Endowment*, 5 (3):205–216, November 2011. CODEN ???? ISSN 2150-8097.

Qumsiyeh:2011:GER

[590] Rani Qumsiyeh, Maria S. Pera, and Yiu-Kai Ng. Generating exact- and ranked partially-matched answers to questions in advertisements. *Proceedings of the VLDB Endowment*, 5(3): 217–228, November 2011. CODEN ???? ISSN 2150-8097.

Fakas:2011:SOS

[591] Georgios J. Fakas, Zhi Cai, and Nikos Mamoulis. Size-l object summaries for relational keyword search. *Proceedings of the VLDB Endowment*, 5(3):229–240, November 2011. CODEN ???? ISSN 2150-8097.

Fang:2011:RER

[592] Lujun Fang, Anish Das Sarma, Cong Yu, and Philip Bohannon. REX: explaining relationships between entity pairs. *Proceedings of the VLDB Endowment*, 5(3):241–252, November 2011. CODEN ???? ISSN 2150-8097.

Li:2011:PJP

[593] Guoliang Li, Dong Deng, Jiannan Wang, and Jianhua Feng. Pass-join: a partition-based method for similarity joins. *Proceedings of the VLDB Endowment*, 5(3):253–264, November 2011. CODEN ???? ISSN 2150-8097.

Hoobin:2011:RLZ

[594] Christopher Hoobin, Simon J. Puglisi, and Justin Zobel. Relative Lempel–Ziv factorization for efficient storage and retrieval of Web collections. *Proceedings of the VLDB Endowment*, 5 (3):265–273, November 2011. CODEN ???? ISSN 2150-8097.

Zhang:2011:TCE

[595] Ning Zhang, Junichi Tatemura, Jignesh M. Patel, and Hakan Hacigümüs. Towards cost-effective storage provisioning for DBMSs. *Proceedings of the VLDB Endowment*, 5(4):274–285, December 2011. CODEN ???? ISSN 2150-8097.

Roh:2011:BTI

[596] Hongchan Roh, Sanghyun Park, Sungho Kim, Mincheol Shin, and Sang-Won Lee. B+-tree index optimization by exploiting internal parallelism of flash-based solid state drives. *Proceedings of the VLDB Endowment*, 5 (4):286–297, December 2011. CODEN ???? ISSN 2150-8097.

Larson:2011:HPC

[597] Per-Åke Larson, Spyros Blanas, Cristian Diaconu, Craig Freedman, Jignesh M. Patel, and Mike Zwilling. High-performance concurrency control mechanisms for main-memory databases. *Proceedings of the VLDB Endowment*, 5(4):298–309, December 2011. CODEN ???? ISSN 2150-8097.

Ma:2011:CTG

[598] Shuai Ma, Yang Cao, Wenfei Fan, Jinpeng Huai, and Tianyu Wo. Capturing topology in graph pattern matching. *Proceedings of the VLDB Endowment*,

5(4):310–321, December 2011. CODEN ???? ISSN 2150-8097.

Kumar:2011:PMO

[599] Arun Kumar and Christopher Ré. Probabilistic management of OCR data using an RDBMS. *Proceedings of the VLDB Endowment*, 5(4):322–333, December 2011. CODEN ???? ISSN 2150-8097.

Pawlik:2011:RRA

[600] Mateusz Pawlik and Nikolaus Augsten. RTED: a robust algorithm for the tree edit distance. *Proceedings of the VLDB Endowment*, 5(4):334–345, December 2011. CODEN ???? ISSN 2150-8097.

Amsterdamer:2011:PLP

[601] Yael Amsterdamer, Susan B. Davidson, Daniel Deutch, Tova Milo, Julia Stoyanovich, and Val Tannen. Putting lipstick on pig: enabling database-style workflow provenance. *Proceedings of the VLDB Endowment*, 5(4):346–357, December 2011. CODEN ???? ISSN 2150-8097.

Gao:2011:RAS

[602] Jun Gao, Ruoming Jin, Jiashuai Zhou, Jeffrey Xu Yu, Xiao Jiang, and Tengjiao Wang. Relational approach for shortest path discovery over large graphs. *Proceedings of the VLDB Endowment*, 5(4):358–369, December 2011. CODEN ???? ISSN 2150-8097.

Barsky:2011:MFC

[603] Marina Barsky, Sangkyum Kim, Tim Weninger, and Jiawei Han. Mining flipping correlations from large datasets with taxonomies. *Proceedings of the VLDB Endowment*, 5(4):370–381, December 2011. CODEN ???? ISSN 2150-8097.

Konig:2011:SAT

[604] Arnd Christian König, Bolin Ding, Surajit Chaudhuri, and Vivek Narasayya. A statistical approach towards robust progress estimation. *Proceedings of the VLDB Endowment*, 5(4):382–393, December 2011. CODEN ???? ISSN 2150-8097.

Sun:2012:RSA

[605] Yizhou Sun, Charu C. Aggarwal, and Jiawei Han. Relation strength-aware clustering of heterogeneous information networks with incomplete attributes. *Proceedings of the VLDB Endowment*, 5(5):394–405, January 2012. CODEN ???? ISSN 2150-8097.

Wu:2012:SPD

[606] Lingkun Wu, Xiaokui Xiao, Dingxiong Deng, Gao Cong, Andy Diwen Zhu, and Shuigeng Zhou. Shortest path and distance queries on road networks: an experimental evaluation. *Proceedings of the VLDB Endowment*, 5(5):406–417, January 2012. CODEN ???? ISSN 2150-8097.

Erdos:2012:FPP

[607] Dóra Erdős, Vatche Ishakian, Andrei Lapets, Evimaria Terzi, and Azer Bestavros. The filter-placement problem and its application to minimizing information multiplicity. *Proceedings of the VLDB Endowment*, 5(5):418–429, January 2012. CODEN ???? ISSN 2150-8097.

Satuluri:2012:BLS

[608] Venu Satuluri and Srinivasan Parthasarathy. Bayesian locality sensitive hashing for fast similarity search. *Proceedings of the VLDB Endowment*, 5(5):430–441,

January 2012. CODEN ???? ISSN 2150-8097.

Fujiwara:2012:FET

[609] Yasuhiro Fujiwara, Makoto Nakatsuji, Makoto Onizuka, and Masaru Kitsuregawa. Fast and exact top-k search for random walk with restart. *Proceedings of the VLDB Endowment*, 5(5): 442–453, January 2012. CODEN ???? ISSN 2150-8097.

Bahmani:2012:DSS

[610] Bahman Bahmani, Ravi Kumar, and Sergei Vassilvitskii. Densest subgraph in streaming and MapReduce. *Proceedings of the VLDB Endowment*, 5(5): 454–465, January 2012. CODEN ???? ISSN 2150-8097.

Silva:2012:MAS

[611] Arlei Silva, Wagner Meira, Jr., and Mohammed J. Zaki. Mining attribute-structure correlated patterns in large attributed graphs. *Proceedings of the VLDB Endowment*, 5(5):466–477, January 2012. CODEN ???? ISSN 2150-8097.

Schnaitter:2012:SAI

[612] Karl Schnaitter and Neoklis Polyzotis. Semi-automatic index tuning: keeping DBAs in the loop. *Proceedings of the VLDB Endowment*, 5(5):478–489, January 2012. CODEN ???? ISSN 2150-8097.

Fink:2012:APD

[613] Robert Fink, Larisa Han, and Dan Olteanu. Aggregation in probabilistic databases via knowledge compilation. *Proceedings of the VLDB Endowment*, 5(5):490–501, January 2012. CODEN ???? ISSN 2150-8097.

Halim:2012:SDC

[614] Felix Halim, Stratos Idreos, Panagiotis Karras, and Roland H. C. Yap. Stochastic database cracking: towards robust adaptive indexing in main-memory column-stores. *Proceedings of the VLDB Endowment*, 5(6):502–513, February 2012. CODEN ???? ISSN 2150-8097.

Li:2012:AMA

[615] Chao Li and Gerome Miklau. An adaptive mechanism for accurate query answering under differential privacy. *Proceedings of the VLDB Endowment*, 5 (6):514–525, February 2012. CODEN ???? ISSN 2150-8097.

Giannikis:2012:SKO

[616] Georgios Giannikis, Gustavo Alonso, and Donald Kossmann. SharedDB: killing one thousand queries with one stone. *Proceedings of the VLDB Endowment*, 5(6):526–537, February 2012. CODEN ???? ISSN 2150-8097.

Selke:2012:PBC

[617] Joachim Selke, Christoph Lofi, and Wolf-Tilo Balke. Pushing the boundaries of crowd-enabled databases with query-driven schema expansion. *Proceedings of the VLDB Endowment*, 5 (6):538–549, February 2012. CODEN ???? ISSN 2150-8097.

Zhao:2012:BAD

[618] Bo Zhao, Benjamin I. P. Rubinstein, Jim Gemmell, and Jiawei Han. A Bayesian approach to discovering truth from conflicting sources for data integration. *Proceedings of the VLDB Endowment*, 5(6):550–561, February 2012. CODEN ???? ISSN 2150-8097.

Upadhyaya:2012:HPS

[619] Prasang Upadhyaya, Magdalena Balazinska, and Dan Suciu. How to price shared optimizations in the cloud. *Proceedings of the VLDB Endowment*, 5 (6):562–573, February 2012. CODEN ???? ISSN 2150-8097.

Angel:2012:DSM

[620] Albert Angel, Nikos Sarkas, Nick Koudas, and Divesh Srivastava. Dense subgraph maintenance under streaming edge weight updates for real-time story identification. *Proceedings of the VLDB Endowment*, 5(6):574–585, February 2012. CODEN ???? ISSN 2150-8097.

Elghandour:2012:RRR

[621] Iman Elghandour and Ashraf Aboulnaga. ReStore: reusing results of MapReduce jobs. *Proceedings of the VLDB Endowment*, 5(6):586–597, February 2012. CODEN ???? ISSN 2150-8097.

Khoussainova:2012:PDM

[622] Nodira Khoussainova, Magdalena Balazinska, and Dan Suciu. PerfXplain: debugging MapReduce job performance. *Proceedings of the VLDB Endowment*, 5(7):598–609, March 2012. CODEN ???? ISSN 2150-8097.

Gullo:2012:UCB

[623] Francesco Gullo and Andrea Tagarelli. Uncertain centroid based partitional clustering of uncertain data. *Proceedings of the VLDB Endowment*, 5(7): 610–621, March 2012. CODEN ???? ISSN 2150-8097.

Bahmani:2012:SM

[624] Bahman Bahmani, Benjamin Moseley, Andrea Vattani, Ravi Kumar, and Sergei Vassilvitskii. Scalable k-means++. *Proceedings of the VLDB Endowment*, 5(7):622–633, March 2012. CODEN ???? ISSN 2150-8097.

Benedikt:2012:QSA

[625] Michael Benedikt, Pierre Bourhis, and Clemens Ley. Querying schemas with access restrictions. *Proceedings of the VLDB Endowment*, 5(7):634–645, March 2012. CODEN ???? ISSN 2150-8097.

Graefe:2012:DDR

[626] Goetz Graefe and Harumi Kuno. Definition, detection, and recovery of single-page failures, a fourth class of database failures. *Proceedings of the VLDB Endowment*, 5(7):646–655, March 2012. CODEN ???? ISSN 2150-8097.

Graefe:2012:CCA

[627] Goetz Graefe, Felix Halim, Stratos Idreos, Harumi Kuno, and Stefan Manegold. Concurrency control for adaptive indexing. *Proceedings of the VLDB Endowment*, 5(7):656–667, March 2012. CODEN ???? ISSN 2150-8097.

Zeng:2012:CSB

[628] Qiang Zeng and Hai Zhuge. Comments on "Stack-based Algorithms for Pattern Matching on DAGs". *Proceedings of the VLDB Endowment*, 5(7): 668–679, March 2012. CODEN ???? ISSN 2150-8097.

Dalvi:2012:ASD

[629] Nilesh Dalvi, Ashwin Machanavajjhala, and Bo Pang. An analysis of structured data on the web. *Proceedings of the VLDB Endowment*, 5(7):680–691, March 2012. CODEN ???? ISSN 2150-8097.

Mouratidis:2012:SPC

[630] Kyriakos Mouratidis and Man Lung Yiu. Shortest path computation with no information leakage. *Proceedings of the VLDB Endowment*, 5(8):692–703, April 2012. CODEN ???? ISSN 2150-8097.

Metwally:2012:VSJ

[631] Ahmed Metwally and Christos Faloutsos. V-SMART-join: a scalable MapReduce framework for all-pair similarity joins of multisets and vectors. *Proceedings of the VLDB Endowment*, 5(8):704–715, April 2012. CODEN ???? ISSN 2150-8097.

Low:2012:DGF

[632] Yucheng Low, Danny Bickson, Joseph Gonzalez, Carlos Guestrin, Aapo Kyrola, and Joseph M. Hellerstein. Distributed GraphLab: a framework for machine learning and data mining in the cloud. *Proceedings of the VLDB Endowment*, 5(8):716–727, April 2012. CODEN ???? ISSN 2150-8097.

Zeng:2012:ALO

[633] Qiang Zeng, Xiaorui Jiang, and Hai Zhuge. Adding logical operators to tree pattern queries on graph-structured data. *Proceedings of the VLDB Endowment*, 5(8):728–739, April 2012. CODEN ???? ISSN 2150-8097.

Singh:2012:LSS

[634] Rishabh Singh and Sumit Gulwani. Learning semantic string transformations from examples. *Proceedings of the VLDB Endowment*, 5(8):740–751, April 2012. CODEN ???? ISSN 2150-8097.

Liu:2012:CDD

[635] Changbin Liu, Lu Ren, Boon Thau Loo, Yun Mao, and Prithwish Basu. Cologne: a declarative distributed constraint optimization platform. *Proceedings of the VLDB Endowment*, 5(8): 752–763, April 2012. CODEN ???? ISSN 2150-8097.

Zhang:2012:OBA

[636] Yi Zhang and Jun Yang. Optimizing I/O for big array analytics. *Proceedings of the VLDB Endowment*, 5 (8):764–775, April 2012. CODEN ???? ISSN 2150-8097.

Bailis:2012:PBS

[637] Peter Bailis, Shivaram Venkataraman, Michael J. Franklin, Joseph M. Hellerstein, and Ion Stoica. Probabilistically bounded staleness for practical partial quorums. *Proceedings of the VLDB Endowment*, 5(8):776–787, April 2012. CODEN ???? ISSN 2150-8097.

Sun:2012:ESM

[638] Zhao Sun, Hongzhi Wang, Haixun Wang, Bin Shao, and Jianzhong Li. Efficient subgraph matching on billion node graphs. *Proceedings of the VLDB Endowment*, 5(9):788–799, May 2012. CODEN ???? ISSN 2150-8097.

Yuan:2012:ESS

[639] Ye Yuan, Guoren Wang, Lei Chen, and Haixun Wang. Efficient subgraph

similarity search on large probabilistic graph databases. *Proceedings of the VLDB Endowment*, 5(9):800–811, May 2012. CODEN ???? ISSN 2150-8097.

Wang:2012:TDM

[640] Jia Wang and James Cheng. Truss decomposition in massive networks. *Proceedings of the VLDB Endowment*, 5 (9):812–823, May 2012. CODEN ???? ISSN 2150-8097.

Fan:2012:SST

[641] Ju Fan, Guoliang Li, Lizhu Zhou, Shanshan Chen, and Jun Hu. Seal: spatio-textual similarity search. *Proceedings of the VLDB Endowment*, 5(9):824–835, May 2012. CODEN ???? ISSN 2150-8097.

Lappas:2012:SBT

[642] Theodoros Lappas, Marcos R. Vieira, Dimitrios Gunopulos, and Vassilis J. Tsotras. On the spatiotemporal burstiness of terms. *Proceedings of the VLDB Endowment*, 5(9):836–847, May 2012. CODEN ???? ISSN 2150-8097.

Shirani-Mehr:2012:ERQ

[643] Houtan Shirani-Mehr, Farnoush Banaei-Kashani, and Cyrus Shahabi. Efficient reachability query evaluation in large spatiotemporal contact datasets. *Proceedings of the VLDB Endowment*, 5 (9):848–859, May 2012. CODEN ???? ISSN 2150-8097.

Nguyen:2012:BMO

[644] Thi Nguyen, Zhen He, Rui Zhang, and Phillip Ward. Boosting moving object indexing through velocity partitioning. *Proceedings of the VLDB Endowment*, 5(9):860–871, May 2012. CODEN ???? ISSN 2150-8097.

Bidoit-Tollu:2012:TBD

[645] Nicole Bidoit-Tollu, Dario Colazzo, and Federico Ulliana. Type-based detection of XML query-update independence. *Proceedings of the VLDB Endowment*, 5(9):872–883, May 2012. CODEN ???? ISSN 2150-8097.

Sowell:2012:MSD

[646] Benjamin Sowell, Wojciech Golab, and Mehul A. Shah. Minuet: a scalable distributed multiversion B-tree. *Proceedings of the VLDB Endowment*, 5 (9):884–895, May 2012. CODEN ???? ISSN 2150-8097.

Yin:2012:CLT

[647] Hongzhi Yin, Bin Cui, Jing Li, Junjie Yao, and Chen Chen. Challenging the long tail recommendation. *Proceedings of the VLDB Endowment*, 5 (9):896–907, May 2012. CODEN ???? ISSN 2150-8097.

Pimplikar:2012:ATQ

[648] Rakesh Pimplikar and Sunita Sarawagi. Answering table queries on the Web using column keywords. *Proceedings of the VLDB Endowment*, 5(10):908–919, June 2012. CODEN ???? ISSN 2150-8097.

Goodrich:2012:EVW

[649] Michael T. Goodrich, Charalampos Papamanthou, Duy Nguyen, Roberto Tamassia, Cristina Videira Lopes, Olga Ohrimenko, and Nikos Triandopoulos. Efficient verification of web-content searching through authenticated web crawlers. *Proceedings of the VLDB Endowment*, 5(10):920–931, June 2012. CODEN ???? ISSN 2150-8097.

Blunschi:2012:SGS

[650] Lukas Blunschi, Claudio Jossen, Donald Kossmann, Magdalini Mori, and Kurt Stockinger. SODA: generating SQL for business users. *Proceedings of the VLDB Endowment*, 5(10):932–943, June 2012. CODEN ???? ISSN 2150-8097.

Terrovitis:2012:PPD

[651] Manolis Terrovitis, Nikos Mamoulis, John Liagouris, and Spiros Skiadopoulos. Privacy preservation by disassociation. *Proceedings of the VLDB Endowment*, 5(10):944–955, June 2012. CODEN ???? ISSN 2150-8097.

Kanagal:2012:SRS

[652] Bhargav Kanagal, Amr Ahmed, Sandeep Pandey, Vanja Josifovski, Jeff Yuan, and Lluis Garcia-Pueyo. Supercharging recommender systems using taxonomies for learning user purchase behavior. *Proceedings of the VLDB Endowment*, 5(10):956–967, June 2012. CODEN ???? ISSN 2150-8097.

Ahmad:2012:DHO

[653] Yanif Ahmad, Oliver Kennedy, Christoph Koch, and Milos Nikolic. DBToaster: higher-order delta processing for dynamic, frequently fresh views. *Proceedings of the VLDB Endowment*, 5 (10):968–979, June 2012. CODEN ???? ISSN 2150-8097.

Agarwal:2012:RTD

[654] Manoj K. Agarwal, Krithi Ramamritham, and Manish Bhide. Real time discovery of dense clusters in highly dynamic graphs: identifying real world events in highly dynamic environments. *Proceedings of the VLDB Endowment*, 5(10):980–991, June 2012. CODEN ???? ISSN 2150-8097.

Papapetrou:2012:SBQ

[655] Odysseas Papapetrou, Minos Garofalakis, and Antonios Deligiannakis. Sketch-based querying of distributed sliding-window data streams. *Proceedings of the VLDB Endowment*, 5(10): 992–1003, June 2012. CODEN ???? ISSN 2150-8097.

Vo:2012:LSL

[656] Hoang Tam Vo, Sheng Wang, Divyakant Agrawal, Gang Chen, and Beng Chin Ooi. LogBase: a scalable log-structured database system in the cloud. *Proceedings of the VLDB Endowment*, 5(10):1004–1015, June 2012. CODEN ???? ISSN 2150-8097.

Lu:2012:EPN

[657] Wei Lu, Yanyan Shen, Su Chen, and Beng Chin Ooi. Efficient processing of k nearest neighbor joins using MapReduce. *Proceedings of the VLDB Endowment*, 5(10):1016–1027, June 2012. CODEN ???? ISSN 2150-8097.

Laptev:2012:EAR

[658] Nikolay Laptev, Kai Zeng, and Carlo Zaniolo. Early accurate results for advanced analytics on MapReduce. *Proceedings of the VLDB Endowment*, 5 (10):1028–1039, June 2012. CODEN ???? ISSN 2150-8097.

Liu:2012:CCD

[659] Xuan Liu, Meiyu Lu, Beng Chin Ooi, Yanyan Shen, Sai Wu, and Meihui Zhang. CDAS: a crowdsourcing data analytics system. *Proceedings of the VLDB Endowment*, 5(10):1040–1051, June 2012. CODEN ???? ISSN 2150-8097.

Sachan:2012:MSS

[660] Mayank Sachan and Arnab Bhattacharya. Mining statistically significant substrings using the chi-square statistic. *Proceedings of the VLDB Endowment*, 5(10):1052–1063, June 2012. CODEN ???? ISSN 2150-8097.

Albutiu:2012:MPS

[661] Martina-Cezara Albutiu, Alfons Kemper, and Thomas Neumann. Massively parallel sort-merge joins in main memory multi-core database systems. *Proceedings of the VLDB Endowment*, 5 (10):1064–1075, June 2012. CODEN ???? ISSN 2150-8097.

Luo:2012:HDH

[662] Tian Luo, Rubao Lee, Michael Mesnier, Feng Chen, and Xiaodong Zhang. hStorage-DB: heterogeneity-aware data management to exploit the full capability of hybrid storage systems. *Proceedings of the VLDB Endowment*, 5(10):1076–1087, June 2012. CODEN ???? ISSN 2150-8097.

Choi:2012:SAM

[663] Dong-Wan Choi, Chin-Wan Chung, and Yufei Tao. A scalable algorithm for maximizing range sum in spatial databases. *Proceedings of the VLDB Endowment*, 5(11):1088–1099, July 2012. CODEN ???? ISSN 2150-8097.

Aly:2012:SQT

[664] Ahmed M. Aly, Walid G. Aref, and Mourad Ouzzani. Spatial queries with two kNN predicates. *Proceedings of the VLDB Endowment*, 5(11):1100–1111, July 2012. CODEN ???? ISSN 2150-8097.

Sheng:2012:OAC

[665] Cheng Sheng, Nan Zhang, Yufei Tao, and Xin Jin. Optimal algorithms for crawling a hidden database in the web. *Proceedings of the VLDB Endowment*, 5(11):1112–1123, July 2012. CODEN ???? ISSN 2150-8097.

Qin:2012:DTR

[666] Lu Qin, Jeffrey Xu Yu, and Lijun Chang. Diversifying top-k results. *Proceedings of the VLDB Endowment*, 5 (11):1124–1135, July 2012. CODEN ???? ISSN 2150-8097.

Cao:2012:KAO

[667] Xin Cao, Lisi Chen, Gao Cong, and Xiaokui Xiao. Keyword-aware optimal route search. *Proceedings of the VLDB Endowment*, 5(11):1136–1147, July 2012. CODEN ???? ISSN 2150-8097.

Cautis:2012:AQU

[668] Bogdan Cautis and Evgeny Kharlamov. Answering queries using views over probabilistic XML: complexity and tractability. *Proceedings of the VLDB Endowment*, 5(11):1148–1159, July 2012. CODEN ???? ISSN 2150-8097.

Jha:2012:PDM

[669] Abhay Jha and Dan Suciu. Probabilistic databases with MarkoViews. *Proceedings of the VLDB Endowment*, 5 (11):1160–1171, July 2012. CODEN ???? ISSN 2150-8097.

Mamouras:2012:CSC

[670] Konstantinos Mamouras, Sigal Oren, Lior Seeman, Lucja Kot, and Johannes

Gehrke. The complexity of social coordination. *Proceedings of the VLDB Endowment*, 5(11):1172–1183, July 2012. CODEN ???? ISSN 2150-8097.

Zhang:2012:EMW

[671] Xiaofei Zhang, Lei Chen, and Min Wang. Efficient multi-way theta-join processing using MapReduce. *Proceedings of the VLDB Endowment*, 5(11): 1184–1195, July 2012. CODEN ???? ISSN 2150-8097.

Lim:2012:STB

[672] Harold Lim, Herodotos Herodotou, and Shivnath Babu. Stubby: a transformation-based optimizer for MapReduce workflows. *Proceedings of the VLDB Endowment*, 5(11):1196–1207, July 2012. CODEN ???? ISSN 2150-8097.

Bao:2012:LWV

[673] Zhuowei Bao, Susan B. Davidson, and Tova Milo. Labeling workflow views with fine-grained dependencies. *Proceedings of the VLDB Endowment*, 5 (11):1208–1219, July 2012. CODEN ???? ISSN 2150-8097.

Szlichta:2012:FOD

[674] Jarosław Szlichta, Parke Godfrey, and Jarek Gryz. Fundamentals of order dependencies. *Proceedings of the VLDB Endowment*, 5(11):1220–1231, July 2012. CODEN ???? ISSN 2150-8097.

Bakibayev:2012:FQE

[675] Nurzhan Bakibayev, Dan Olteanu, and Jakub Závodný. FDB: a query engine for factorised relational databases. *Proceedings of the VLDB Endowment*, 5 (11):1232–1243, July 2012. CODEN ???? ISSN 2150-8097.

Cao:2012:OAW

[676] Yu Cao, Chee-Yong Chan, Jie Li, and Kian-Lee Tan. Optimization of analytic window functions. *Proceedings of the VLDB Endowment*, 5(11):1244–1255, July 2012. CODEN ???? ISSN 2150-8097.

Hueske:2012:OBB

[677] Fabian Hueske, Mathias Peters, Matthias J. Sax, Astrid Rheinländer, Rico Bergmann, Aljoscha Krettek, and Kostas Tzoumas. Opening the black boxes in data flow optimization. *Proceedings of the VLDB Endowment*, 5 (11):1256–1267, July 2012. CODEN ???? ISSN 2150-8097.

Ewen:2012:SFI

[678] Stephan Ewen, Kostas Tzoumas, Moritz Kaufmann, and Volker Markl. Spinning fast iterative data flows. *Proceedings of the VLDB Endowment*, 5 (11):1268–1279, July 2012. CODEN ???? ISSN 2150-8097.

Mihaylov:2012:RRD

[679] Svilen R. Mihaylov, Zachary G. Ives, and Sudipto Guha. REX: recursive, delta-based data-centric computation. *Proceedings of the VLDB Endowment*, 5(11):1280–1291, July 2012. CODEN ???? ISSN 2150-8097.

Cheng:2012:KRW

[680] James Cheng, Zechao Shang, Hong Cheng, Haixun Wang, and Jeffrey Xu Yu. K-reach: who is in your small world. *Proceedings of the VLDB Endowment*, 5(11):1292–1303, July 2012. CODEN ???? ISSN 2150-8097.

Fan:2012:PGD

[681] Wenfei Fan, Xin Wang, and Yinghui Wu. Performance guarantees for distributed reachability queries. *Proceedings of the VLDB Endowment*, 5(11): 1304–1316, July 2012. CODEN ???? ISSN 2150-8097.

Chubak:2012:EIQ

[682] Pirooz Chubak and Davood Rafiei. Efficient indexing and querying over syntactically annotated trees. *Proceedings of the VLDB Endowment*, 5(11):1316–1327, July 2012. CODEN ???? ISSN 2150-8097.

Barany:2012:QGN

[683] Vince Bárány, Balder ten Cate, and Martin Otto. Queries with guarded negation. *Proceedings of the VLDB Endowment*, 5(11):1328–1339, July 2012. CODEN ???? ISSN 2150-8097.

Li:2012:PFI

[684] Ninghui Li, Wahbeh Qardaji, Dong Su, and Jianneng Cao. PrivBasis: frequent itemset mining with differential privacy. *Proceedings of the VLDB Endowment*, 5(11):1340–1351, July 2012. CODEN ???? ISSN 2150-8097.

Yuan:2012:LRM

[685] Ganzhao Yuan, Zhenjie Zhang, Marianne Winslett, Xiaokui Xiao, Yin Yang, and Zhifeng Hao. Low-rank mechanism: optimizing batch queries under differential privacy. *Proceedings of the VLDB Endowment*, 5(11):1352–1363, July 2012. CODEN ???? ISSN 2150-8097.

Zhang:2012:FMR

[686] Jun Zhang, Zhenjie Zhang, Xiaokui Xiao, Yin Yang, and Marianne Winslett. Functional mechanism: regression analysis under differential privacy. *Proceedings of the VLDB Endowment*, 5(11):1364–1375, July 2012. CODEN ???? ISSN 2150-8097.

Boldi:2012:IUG

[687] Paolo Boldi, Francesco Bonchi, Aristides Gionis, and Tamir Tassa. Injecting uncertainty in graphs for identity obfuscation. *Proceedings of the VLDB Endowment*, 5(11):1376–1387, July 2012. CODEN ???? ISSN 2150-8097.

Cao:2012:PMR

[688] Jianneng Cao and Panagiotis Karras. Publishing microdata with a robust privacy guarantee. *Proceedings of the VLDB Endowment*, 5(11):1388–1399, July 2012. CODEN ???? ISSN 2150-8097.

Guan:2012:MTE

[689] Ziyu Guan, Xifeng Yan, and Lance M. Kaplan. Measuring two-event structural correlations on graphs. *Proceedings of the VLDB Endowment*, 5(11): 1400–1411, July 2012. CODEN ???? ISSN 2150-8097.

Jestes:2012:RLT

[690] Jeffrey Jestes, Jeff M. Phillips, Feifei Li, and Mingwang Tang. Ranking large temporal data. *Proceedings of the VLDB Endowment*, 5(11):1412–1423, July 2012. CODEN ???? ISSN 2150-8097.

Funke:2012:CTD

[691] Florian Funke, Alfons Kemper, and Thomas Neumann. Compacting transactional data in hybrid OLTP&OLAP databases. *Proceedings of the VLDB*

Endowment, 5(11):1424–1435, July 2012. CODEN ???? ISSN 2150-8097.

Hall:2012:PTC

[692] Alexander Hall, Olaf Bachmann, Robert Büssow, Silviu Ganceanu, and Marc Nunkesser. Processing a trillion cells per mouse click. *Proceedings of the VLDB Endowment*, 5(11):1436–1446, July 2012. CODEN ???? ISSN 2150-8097.

Porobic:2012:OHI

[693] Danica Porobic, Ippokratis Pandis, Miguel Branco, Pinar Tözün, and Anastasia Ailamaki. OLTP on hardware islands. *Proceedings of the VLDB Endowment*, 5(11):1447–1458, July 2012. CODEN ???? ISSN 2150-8097.

Patterson:2012:SSC

[694] Stacy Patterson, Aaron J. Elmore, Faisal Nawab, Divyakant Agrawal, and Amr El Abbadi. Serializability, not serial: concurrency control and availability in multi-datacenter datastores. *Proceedings of the VLDB Endowment*, 5 (11):1459–1470, July 2012. CODEN ???? ISSN 2150-8097.

Cheung:2012:APD

[695] Alvin Cheung, Samuel Madden, Owen Arden, and Andrew C. Myers. Automatic partitioning of database applications. *Proceedings of the VLDB Endowment*, 5(11):1471–1482, July 2012. CODEN ???? ISSN 2150-8097.

Wang:2012:CCE

[696] Jiannan Wang, Tim Kraska, Michael J. Franklin, and Jianhua Feng. CrowdER: crowdsourcing entity resolution. *Proceedings of the VLDB Endowment*, 5 (11):1483–1494, July 2012. CODEN ???? ISSN 2150-8097.

Cao:2012:WAJ

[697] Caleb Chen Cao, Jieying She, Yongxin Tong, and Lei Chen. Whom to ask?: jury selection for decision making tasks on micro-blog services. *Proceedings of the VLDB Endowment*, 5(11):1495–1506, July 2012. CODEN ???? ISSN 2150-8097.

Yang:2012:AAL

[698] Xiaochun Yang, Honglei Liu, and Bin Wang. ALAE: accelerating local alignment with affine gap exactly in biosequence databases. *Proceedings of the VLDB Endowment*, 5(11):1507–1518, July 2012. CODEN ???? ISSN 2150-8097.

Candan:2012:SCD

[699] K. Selçuk Candan, Rosaria Rossini, Xiaolan Wang, and Maria Luisa Sapino. sDTW: computing DTW distances using locally relevant constraints based on salient feature alignments. *Proceedings of the VLDB Endowment*, 5(11): 1519–1530, July 2012. CODEN ???? ISSN 2150-8097.

Tauheed:2012:SPL

[700] Farhan Tauheed, Thomas Heinis, Felix Schürmann, Henry Markram, and Anastasia Ailamaki. SCOUT: prefetching for latent structure following queries. *Proceedings of the VLDB Endowment*, 5(11):1531–1542, July 2012. CODEN ???? ISSN 2150-8097.

Wang:2012:API

[701] Kaibo Wang, Yin Huai, Rubao Lee, Fusheng Wang, Xiaodong Zhang, and

Joel H. Saltz. Accelerating pathology image data cross-comparison on CPU–GPU hybrid systems. *Proceedings of the VLDB Endowment*, 5(11): 1543–1554, July 2012. CODEN ???? ISSN 2150-8097.

Li:2012:RER

[702] Jiexing Li, Arnd Christian König, Vivek Narasayya, and Surajit Chaudhuri. Robust estimation of resource consumption for SQL queries using statistical techniques. *Proceedings of the VLDB Endowment*, 5(11):1555–1566, July 2012. CODEN ???? ISSN 2150-8097.

Das:2012:WTW

[703] Mahashweta Das, Saravanan Thirumuruganathan, Sihem Amer-Yahia, Gautam Das, and Cong Yu. Who tags what?: an analysis framework. *Proceedings of the VLDB Endowment*, 5 (11):1567–1578, July 2012. CODEN ???? ISSN 2150-8097.

Zhu:2012:GFE

[704] Haohan Zhu, George Kollios, and Vassilis Athitsos. A generic framework for efficient and effective subsequence retrieval. *Proceedings of the VLDB Endowment*, 5(11):1579–1590, July 2012. CODEN ???? ISSN 2150-8097.

Dittrich:2012:OAE

[705] Jens Dittrich, Jorge-Arnulfo Quiané-Ruiz, Stefan Richter, Stefan Schuh, Alekh Jindal, and Jörg Schad. Only aggressive elephants are fast elephants. *Proceedings of the VLDB Endowment*, 5(11):1591–1602, July 2012. CODEN ???? ISSN 2150-8097.

Li:2012:MLP

[706] Rui Li, Shengjie Wang, and Kevin Chen-Chuan Chang. Multiple location profiling for users and relationships from social network and content. *Proceedings of the VLDB Endowment*, 5(11):1603–1614, July 2012. CODEN ???? ISSN 2150-8097.

Kang:2012:FBE

[707] Woon-Hak Kang, Sang-Won Lee, and Bongki Moon. Flash-based extended cache for higher throughput and faster recovery. *Proceedings of the VLDB Endowment*, 5(11):1615–1626, July 2012. CODEN ???? ISSN 2150-8097.

Bender:2012:DTH

[708] Michael A. Bender, Martin Farach-Colton, Rob Johnson, Russell Kraner, Bradley C. Kuszmaul, Dzejla Medjedovic, Pablo Montes, Pradeep Shetty, Richard P. Spillane, and Erez Zadok. Don't thrash: how to cache your hash on flash. *Proceedings of the VLDB Endowment*, 5(11):1627–1637, July 2012. CODEN ???? ISSN 2150-8097.

Isele:2012:LEL

[709] Robert Isele and Christian Bizer. Learning expressive linkage rules using genetic programming. *Proceedings of the VLDB Endowment*, 5(11):1638–1649, July 2012. CODEN ???? ISSN 2150-8097.

Tong:2012:MFI

[710] Yongxin Tong, Lei Chen, Yurong Cheng, and Philip S. Yu. Mining frequent itemsets over uncertain databases. *Proceedings of the VLDB Endowment*, 5(11):1650–1661, July 2012. CODEN ???? ISSN 2150-8097.

Dallachiesa:2012:UTS

[711] Michele Dallachiesa, Besmira Nushi, Katsiaryna Mirylenka, and Themis Palpanas. Uncertain time-series similarity: return to the basics. *Proceedings of the VLDB Endowment*, 5(11):1662–1673, July 2012. CODEN ???? ISSN 2150-8097.

Dasu:2012:SDC

[712] Tamraparni Dasu and Ji Meng Loh. Statistical distortion: consequences of data cleaning. *Proceedings of the VLDB Endowment*, 5(11):1674–1683, July 2012. CODEN ???? ISSN 2150-8097.

Lang:2012:TEE

[713] Willis Lang, Stavros Harizopoulos, Jignesh M. Patel, Mehul A. Shah, and Dimitris Tsirogiannis. Towards energy-efficient database cluster design. *Proceedings of the VLDB Endowment*, 5 (11):1684–1695, July 2012. CODEN ???? ISSN 2150-8097.

Jensen:2012:DMS

[714] Christian S. Jensen. Data management on the spatial web. *Proceedings of the VLDB Endowment*, 5(12):1696, August 2012. CODEN ???? ISSN 2150-8097.

Dietrich:2012:DAO

[715] Brenda Dietrich. Data analytics opportunities in a smarter planet. *Proceedings of the VLDB Endowment*, 5(12): 1697, August 2012. CODEN ???? ISSN 2150-8097.

Sahin:2012:CEM

[716] Kenan Sahin. Challenges in economic massive content storage and management (MCSAM) in the era of self-organizing, self-expanding and self-linking data clusters. *Proceedings of the VLDB Endowment*, 5(12):1698, August 2012. CODEN ???? ISSN 2150-8097.

Manku:2012:AFC

[717] Gurmeet Singh Manku and Rajeev Motwani. Approximate frequency counts over data streams. *Proceedings of the VLDB Endowment*, 5(12):1699, August 2012. CODEN ???? ISSN 2150-8097.

Hellerstein:2012:MAL

[718] Joseph M. Hellerstein, Christoper Ré, Florian Schoppmann, Daisy Zhe Wang, Eugene Fratkin, Aleksander Gorajek, Kee Siong Ng, Caleb Welton, Xixuan Feng, Kun Li, and Arun Kumar. The MADlib analytics library: or MAD skills, the SQL. *Proceedings of the VLDB Endowment*, 5(12):1700–1711, August 2012. CODEN ???? ISSN 2150-8097.

Floratou:2012:CEH

[719] Avrilia Floratou, Nikhil Teletia, David J. DeWitt, Jignesh M. Patel, and Donghui Zhang. Can the elephants handle the NoSQL onslaught? *Proceedings of the VLDB Endowment*, 5(12): 1712–1723, August 2012. CODEN ???? ISSN 2150-8097.

Rabl:2012:SBD

[720] Tilmann Rabl, Sergio Gómez-Villamor, Mohammad Sadoghi, Victor Muntés-Mulero, Hans-Arno Jacobsen, and Serge Mankovskii. Solving big data challenges for enterprise application performance management. *Proceedings of the VLDB Endowment*, 5(12):1724–1735, August 2012. CODEN ???? ISSN 2150-8097.

Shinnar:2012:MIP

[721] Avraham Shinnar, David Cunningham, Vijay Saraswat, and Benjamin Herta. M3R: increased performance for in-memory Hadoop jobs. *Proceedings of the VLDB Endowment*, 5(12):1736–1747, August 2012. CODEN ???? ISSN 2150-8097.

Rosch:2012:SAH

[722] Philipp Rösch, Lars Dannecker, Franz Färber, and Gregor Hackenbroich. A storage advisor for hybrid-store databases. *Proceedings of the VLDB Endowment*, 5(12):1748–1758, August 2012. CODEN ???? ISSN 2150-8097.

Switakowski:2012:CSP

[723] Michał Świtakowski, Peter Boncz, and Marcin Zukowski. From cooperative scans to predictive buffer management. *Proceedings of the VLDB Endowment*, 5(12):1759–1770, August 2012. CODEN ???? ISSN 2150-8097.

Lee:2012:ULI

[724] George Lee, Jimmy Lin, Chuang Liu, Andrew Lorek, and Dmitriy Ryaboy. The unified logging infrastructure for data analytics at Twitter. *Proceedings of the VLDB Endowment*, 5(12):1771–1780, August 2012. CODEN ???? ISSN 2150-8097.

Talius:2012:TLB

[725] Tomas Talius, Robin Dhamankar, Andrei Dumitrache, and Hanuma Kodavalla. Transaction log based application error recovery and point in-time query. *Proceedings of the VLDB Endowment*, 5(12):1781–1789, August 2012. CODEN ???? ISSN 2150-8097.

Lamb:2012:VAD

[726] Andrew Lamb, Matt Fuller, Ramakrishna Varadarajan, Nga Tran, Ben Vandiver, Lyric Doshi, and Chuck Bear. The Vertica Analytic Database: C-Store 7 years later. *Proceedings of the VLDB Endowment*, 5(12):1790–1801, August 2012. CODEN ???? ISSN 2150-8097.

Chen:2012:IAP

[727] Yanpei Chen, Sara Alspaugh, and Randy Katz. Interactive analytical processing in big data systems: a cross-industry study of MapReduce workloads. *Proceedings of the VLDB Endowment*, 5(12):1802–1813, August 2012. CODEN ???? ISSN 2150-8097.

Lam:2012:MMS

[728] Wang Lam, Lu Liu, Sts Prasad, Anand Rajaraman, Zoheb Vacheri, and AnHai Doan. Muppet: MapReduce-style processing of fast data. *Proceedings of the VLDB Endowment*, 5(12):1814–1825, August 2012. CODEN ???? ISSN 2150-8097.

Jacques-Silva:2012:BUD

[729] Gabriela Jacques-Silva, Bugra Gedik, Rohit Wagle, Kun-Lung Wu, and Vibhore Kumar. Building user-defined runtime adaptation routines for stream processing applications. *Proceedings of the VLDB Endowment*, 5(12):1826–1837, August 2012. CODEN ???? ISSN 2150-8097.

Jiang:2012:MSP

[730] Junchen Jiang, Hongji Bao, Edward Y. Chang, and Yuqian Li. MOIST: a scalable and parallel moving object indexer with school tracking. *Proceedings*

of the VLDB Endowment, 5(12):1838–1849, August 2012. CODEN ???? ISSN 2150-8097.

Ports:2012:SSI

[731] Dan R. K. Ports and Kevin Grittner. Serializable snapshot isolation in PostgreSQL. *Proceedings of the VLDB Endowment*, 5(12):1850–1861, August 2012. CODEN ???? ISSN 2150-8097.

Murthy:2012:EEU

[732] Karin Murthy, Prasad M. Deshpande, Atreyee Dey, Ramanujam Halasipuram, Mukesh Mohania, P. Deepak, Jennifer Reed, and Scott Schumacher. Exploiting evidence from unstructured data to enhance master data management. *Proceedings of the VLDB Endowment*, 5(12):1862–1873, August 2012. CODEN ???? ISSN 2150-8097.

Wu:2012:AOW

[733] Lili Wu, Roshan Sumbaly, Chris Riccomini, Gordon Koo, Hyung Jin Kim, Jay Kreps, and Sam Shah. Avatara: OLAP for web-scale analytics products. *Proceedings of the VLDB Endowment*, 5 (12):1874–1877, August 2012. CODEN ???? ISSN 2150-8097.

Kolb:2012:DED

[734] Lars Kolb, Andreas Thor, and Erhard Rahm. Dedoop: efficient deduplication with Hadoop. *Proceedings of the VLDB Endowment*, 5(12):1878–1881, August 2012. CODEN ???? ISSN 2150-8097.

Liu:2012:MBD

[735] Xiufeng Liu, Christian Thomsen, and Torben Bach Pedersen. MapReduce-based dimensional ETL made easy. *Proceedings of the VLDB Endowment*, 5(12):1882–1885, August 2012. CODEN ???? ISSN 2150-8097.

Xu:2012:CIE

[736] Huiqi Xu, Zhen Li, Shumin Guo, and Keke Chen. CloudVista: interactive and economical visual cluster analysis for big data in the cloud. *Proceedings of the VLDB Endowment*, 5(12):1886–1889, August 2012. CODEN ???? ISSN 2150-8097.

Alexandrov:2012:MSE

[737] Alexander Alexandrov, Kostas Tzoumas, and Volker Markl. Myriad: scalable and expressive data generation. *Proceedings of the VLDB Endowment*, 5 (12):1890–1893, August 2012. CODEN ???? ISSN 2150-8097.

Wu:2012:DDC

[738] Eugene Wu, Samuel Madden, and Michael Stonebraker. A demonstration of DBWipes: clean as you query. *Proceedings of the VLDB Endowment*, 5 (12):1894–1897, August 2012. CODEN ???? ISSN 2150-8097.

Alsubaiee:2012:AOS

[739] Sattam Alsubaiee, Yasser Altowim, Hotham Altwaijry, Alexander Behm, Vinayak Borkar, Yingyi Bu, Michael Carey, Raman Grover, Zachary Heilbron, Young-Seok Kim, Chen Li, Nicola Onose, Pouria Pirzadeh, Rares Vernica, and Jian Wen. ASTERIX: an open source system for “Big Data” management and analysis (demo). *Proceedings of the VLDB Endowment*, 5 (12):1898–1901, August 2012. CODEN ???? ISSN 2150-8097.

Agarwal:2012:BDI

[740] Sameer Agarwal, Anand P. Iyer, Aurojit Panda, Samuel Madden, Barzan Mozafari, and Ion Stoica. Blink and

it's done: interactive queries on very large data. *Proceedings of the VLDB Endowment*, 5(12):1902–1905, August 2012. CODEN ???? ISSN 2150-8097.

Roy:2012:MGD

[741] Abhishek Roy, Yanlei Diao, Evan Mauceli, Yiping Shen, and Bai-Lin Wu. Massive genomic data processing and deep analysis. *Proceedings of the VLDB Endowment*, 5(12):1906–1909, August 2012. CODEN ???? ISSN 2150-8097.

Liarou:2012:MDO

[742] Erietta Liarou, Stratos Idreos, Stefan Manegold, and Martin Kersten. MonetDB/DataCell: online analytics in a streaming column-store. *Proceedings of the VLDB Endowment*, 5(12):1910–1913, August 2012. CODEN ???? ISSN 2150-8097.

Cao:2012:SSE

[743] Xin Cao, Gao Cong, Christian S. Jensen, Jun Jie Ng, Beng Chin Ooi, Nhan-Tue Phan, and Dingming Wu. SWORS: a system for the efficient retrieval of relevant spatial web objects. *Proceedings of the VLDB Endowment*, 5(12):1914–1917, August 2012. CODEN ???? ISSN 2150-8097.

Morishima:2012:CCD

[744] Atsuyuki Morishima, Norihide Shinagawa, Tomomi Mitsuishi, Hideto Aoki, and Shun Fukusumi. CyLog/Crowd4U: a declarative platform for complex data-centric crowdsourcing. *Proceedings of the VLDB Endowment*, 5(12): 1918–1921, August 2012. CODEN ???? ISSN 2150-8097.

Silva:2012:EDS

[745] Yasin N. Silva and Spencer Pearson. Exploiting database similarity joins for metric spaces. *Proceedings of the VLDB Endowment*, 5(12):1922–1925, August 2012. CODEN ???? ISSN 2150-8097.

Gawade:2012:SPI

[746] Mrunal Gawade and Martin Kersten. Stethoscope: a platform for interactive visual analysis of query execution plans. *Proceedings of the VLDB Endowment*, 5(12):1926–1929, August 2012. CODEN ???? ISSN 2150-8097.

Kotsifakos:2012:HSS

[747] Alexios Kotsifakos, Panagiotis Papapetrou, Jaakko Hollmén, Dimitrios Gunopulos, Vassilis Athitsos, and George Kollios. Hum-a-song: a subsequence matching with gaps-range-tolerances query-by-humming system. *Proceedings of the VLDB Endowment*, 5(12):1930–1933, August 2012. CODEN ???? ISSN 2150-8097.

Kwon:2012:SAM

[748] YongChul Kwon, Magdalena Balazinska, Bill Howe, and Jerome Rolia. SkewTune in action: mitigating skew in MapReduce applications. *Proceedings of the VLDB Endowment*, 5(12): 1934–1937, August 2012. CODEN ???? ISSN 2150-8097.

Abouzied:2012:PQS

[749] Azza Abouzied, Joseph M. Hellerstein, and Avi Silberschatz. Playful query specification with DataPlay. *Proceedings of the VLDB Endowment*, 5(12): 1938–1941, August 2012. CODEN ???? ISSN 2150-8097.

Alagiannis:2012:NAA

[750] Ioannis Alagiannis, Renata Borovica, Miguel Branco, Stratos Idreos, and

Anastasia Ailamaki. NoDB in action: adaptive query processing on raw data. *Proceedings of the VLDB Endowment*, 5(12):1942–1945, August 2012. CODEN ???? ISSN 2150-8097.

Wenzel:2012:CPQ

[751] Florian Wenzel, Markus Endres, Stefan Mandl, and Werner Kießling. Complex preference queries supporting spatial applications for user groups. *Proceedings of the VLDB Endowment*, 5 (12):1946–1949, August 2012. CODEN ???? ISSN 2150-8097.

Bakibayev:2012:DFQ

[752] Nurzhan Bakibayev, Dan Olteanu, and Jakub Závodný. Demonstration of the FDB query engine for factorised databases. *Proceedings of the VLDB Endowment*, 5(12):1950–1953, August 2012. CODEN ???? ISSN 2150-8097.

Xu:2012:PRD

[753] Zichen Xu, Yi-Cheng Tu, and Xiaorui Wang. PET: reducing database energy cost via query optimization. *Proceedings of the VLDB Endowment*, 5(12): 1954–1957, August 2012. CODEN ???? ISSN 2150-8097.

Letelier:2012:SSA

[754] Andrés Letelier, Jorge Pérez, Reinhard Pichler, and Sebastian Skritek. SPAM: a SPARQL analysis and manipulation tool. *Proceedings of the VLDB Endowment*, 5(12):1958–1961, August 2012. CODEN ???? ISSN 2150-8097.

Koutris:2012:QDP

[755] Paraschos Koutris, Prasang Upadhyaya, Magdalena Balazinska, Bill Howe, and Dan Suciu. QueryMarket demonstration: pricing for online data markets. *Proceedings of the VLDB Endowment*, 5(12):1962–1965, August 2012. CODEN ???? ISSN 2150-8097.

Luo:2012:DSD

[756] Siqiang Luo, Yifeng Luo, Shuigeng Zhou, Gao Cong, and Jihong Guan. DISKs: a system for distributed spatial group keyword search on road networks. *Proceedings of the VLDB Endowment*, 5(12):1966–1969, August 2012. CODEN ???? ISSN 2150-8097.

Endrullis:2012:WEM

[757] Stefan Endrullis, Andreas Thor, and Erhard Rahm. WETSUIT: an efficient mashup tool for searching and fusing web entities. *Proceedings of the VLDB Endowment*, 5(12):1970–1973, August 2012. CODEN ???? ISSN 2150-8097.

Khalefa:2012:MBI

[758] Mohamed E. Khalefa, Ulrike Fischer, Torben Bach Pedersen, and Wolfgang Lehner. Model-based integration of past & future in TimeTravel. *Proceedings of the VLDB Endowment*, 5(12): 1974–1977, August 2012. CODEN ???? ISSN 2150-8097.

Eberius:2012:DEB

[759] Julian Eberius, Maik Thiele, Katrin Braunschweig, and Wolfgang Lehner. DrillBeyond: enabling business analysts to explore the Web of Open Data. *Proceedings of the VLDB Endowment*, 5(12):1978–1981, August 2012. CODEN ???? ISSN 2150-8097.

Nakashole:2012:DER

[760] Ndapandula Nakashole, Gerhard Weikum, and Fabian Suchanek. Discovering and exploring relations on the web. *Proceedings of the VLDB Endowment*, 5

(12):1982–1985, August 2012. CODEN ???? ISSN 2150-8097.

Thirumuruganathan:2012:MME

[761] Saravanan Thirumuruganathan, Mahashweta Das, Shrikant Desai, Sihem Amer-Yahia, Gautam Das, and Cong Yu. MapRat: meaningful explanation, interactive exploration and geo-visualization of collaborative ratings. *Proceedings of the VLDB Endowment*, 5(12):1986–1989, August 2012. CODEN ???? ISSN 2150-8097.

Park:2012:DSD

[762] Hyunjung Park, Hector Garcia-Molina, Richard Pang, Neoklis Polyzotis, Aditya Parameswaran, and Jennifer Widom. Deco: a system for declarative crowdsourcing. *Proceedings of the VLDB Endowment*, 5(12):1990–1993, August 2012. CODEN ???? ISSN 2150-8097.

Martens:2012:DAX

[763] Wim Martens, Matthias Niewerth, Frank Neven, and Thomas Schwentick. Developing and analyzing XSDs through BonXai. *Proceedings of the VLDB Endowment*, 5(12):1994–1997, August 2012. CODEN ???? ISSN 2150-8097.

Elmore:2012:IEG

[764] Aaron J. Elmore, Sudipto Das, Divyakant Agrawal, and Amr El Abbadi. InfoPuzzle: exploring group decision making in mobile peer-to-peer databases. *Proceedings of the VLDB Endowment*, 5(12):1998–2001, August 2012. CODEN ???? ISSN 2150-8097.

Xu:2012:MQG

[765] Jianqiu Xu and Ralf Hartmut Güting. Manage and query generic moving objects in SECONDO. *Proceedings of the VLDB Endowment*, 5(12):2002–2005, August 2012. CODEN ???? ISSN 2150-8097.

Li:2012:CFH

[766] Pei Li, Christina Tziviskou, Haidong Wang, Xin Luna Dong, Xiaoguang Liu, Andrea Maurino, and Divesh Srivastava. Chronos: facilitating history discovery by linking temporal records. *Proceedings of the VLDB Endowment*, 5(12):2006–2009, August 2012. CODEN ???? ISSN 2150-8097.

Koubarakis:2012:TDP

[767] Manolis Koubarakis, Mihai Datcu, Charalambos Kontoes, Ugo Di Giammatteo, Stefan Manegold, and Eva Klien. TELEIOS: a database-powered virtual earth observatory. *Proceedings of the VLDB Endowment*, 5(12):2010–2013, August 2012. CODEN ???? ISSN 2150-8097.

Dittrich:2012:EBD

[768] Jens Dittrich and Jorge-Arnulfo Quiané-Ruiz. Efficient big data processing in Hadoop MapReduce. *Proceedings of the VLDB Endowment*, 5 (12):2014–2015, August 2012. CODEN ???? ISSN 2150-8097.

Shim:2012:MAB

[769] Kyuseok Shim. MapReduce algorithms for big data analysis. *Proceedings of the VLDB Endowment*, 5(12):2016–2017, August 2012. CODEN ???? ISSN 2150-8097.

Getoor:2012:ERT

[770] Lise Getoor and Ashwin Machanavajjhala. Entity resolution: theory, practice & open challenges. *Proceedings*

of the VLDB Endowment, 5(12):2018–2019, August 2012. CODEN ???? ISSN 2150-8097.

Schindler:2012:CND

[771] Jiri Schindler. I/O characteristics of NoSQL databases. *Proceedings of the VLDB Endowment*, 5(12):2020–2021, August 2012. CODEN ???? ISSN 2150-8097.

Sun:2012:MKI

[772] Yizhou Sun, Jiawei Han, Xifeng Yan, and Philip S. Yu. Mining knowledge from interconnected data: a heterogeneous information network analysis approach. *Proceedings of the VLDB Endowment*, 5(12):2022–2023, August 2012. CODEN ???? ISSN 2150-8097.

Prakash:2012:UMC

[773] B. Aditya Prakash and Christos Faloutsos. Understanding and managing cascades on large graphs. *Proceedings of the VLDB Endowment*, 5(12):2024–2025, August 2012. CODEN ???? ISSN 2150-8097.

Dogac:2012:IES

[774] Asuman Dogac. Interoperability in eHealth systems. *Proceedings of the VLDB Endowment*, 5(12):2026–2027, August 2012. CODEN ???? ISSN 2150-8097.

Agrawal:2012:SPP

[775] Divyakant Agrawal, Amr El Abbadi, and Shiyuan Wang. Secure and privacy-preserving data services in the cloud: a data centric view. *Proceedings of the VLDB Endowment*, 5(12):2028–2029, August 2012. CODEN ???? ISSN 2150-8097.

Guha:2012:GSS

[776] Sudipto Guha and Andrew McGregor. Graph synopses, sketches, and streams: a survey. *Proceedings of the VLDB Endowment*, 5(12):2030–2031, August 2012. CODEN ???? ISSN 2150-8097.

Labrinidis:2012:COB

[777] Alexandros Labrinidis and H. V. Jagadish. Challenges and opportunities with big data. *Proceedings of the VLDB Endowment*, 5(12):2032–2033, August 2012. CODEN ???? ISSN 2150-8097.

ElAbbadi:2012:PDS

[778] Amr El Abbadi and Mohamed F. Mokbel. Panel discussion on social networks and mobility in the cloud. *Proceedings of the VLDB Endowment*, 5(12):2034–2035, August 2012. CODEN ???? ISSN 2150-8097.

Bouros:2012:STS

[779] Panagiotis Bouros, Shen Ge, and Nikos Mamoulis. Spatio-textual similarity joins. *Proceedings of the VLDB Endowment*, 6(1):1–12, November 2012. CODEN ???? ISSN 2150-8097.

Drosou:2012:DDR

[780] Marina Drosou and Evaggelia Pitoura. DisC diversity: result diversification based on dissimilarity and coverage. *Proceedings of the VLDB Endowment*, 6(1):13–24, November 2012. CODEN ???? ISSN 2150-8097.

Zeng:2012:DPF

[781] Chen Zeng, Jeffrey F. Naughton, and Jin-Yi Cai. On differentially private frequent itemset mining. *Proceedings of the VLDB Endowment*, 6(1):25–36, November 2012. CODEN ???? ISSN 2150-8097.

Dong:2012:LMS

[782] Xin Luna Dong, Barna Saha, and Divesh Srivastava. Less is more: selecting sources wisely for integration. *Proceedings of the VLDB Endowment*, 6(2): 37–48, December 2012. CODEN ???? ISSN 2150-8097.

Zhou:2012:DTA

[783] Wenchao Zhou, Suyog Mapara, Yiqing Ren, Yang Li, Andreas Haeberlen, Zachary Ives, Boon Thau Loo, and Micah Sherr. Distributed time-aware provenance. *Proceedings of the VLDB Endowment*, 6(2):49–60, December 2012. CODEN ???? ISSN 2150-8097.

Calvanese:2012:QPU

[784] Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, and Moshe Y. Vardi. Query processing under GLAV mappings for relational and graph databases. *Proceedings of the VLDB Endowment*, 6(2):61–72, December 2012. CODEN ???? ISSN 2150-8097.

Mouratidis:2012:CIR

[785] Kyriakos Mouratidis and HweeHwa Pang. Computing immutable regions for subspace top-k queries. *Proceedings of the VLDB Endowment*, 6(2):73–84, December 2012. CODEN ???? ISSN 2150-8097.

Zhao:2012:LSC

[786] Feng Zhao and Anthony K. H. Tung. Large scale cohesive subgraphs discovery for social network visual analysis. *Proceedings of the VLDB Endowment*, 6(2):85–96, December 2012. CODEN ???? ISSN 2150-8097.

Li:2012:TFD

[787] Xian Li, Xin Luna Dong, Kenneth Lyons, Weiyi Meng, and Divesh Srivastava. Truth finding on the Deep Web: is the problem solved? *Proceedings of the VLDB Endowment*, 6(2):97–108, December 2012. CODEN ???? ISSN 2150-8097.

Marcus:2012:CC

[788] Adam Marcus, David Karger, Samuel Madden, Robert Miller, and Sewoong Oh. Counting with the crowd. *Proceedings of the VLDB Endowment*, 6 (2):109–120, December 2012. CODEN ???? ISSN 2150-8097.

Zou:2012:CDA

[789] Tao Zou, Ronan Le Bras, Marcos Vaz Salles, Alan Demers, and Johannes Gehrke. ClouDiA: a deployment advisor for public clouds. *Proceedings of the VLDB Endowment*, 6(2):121–132, December 2012. CODEN ???? ISSN 2150-8097.

Lee:2012:DCS

[790] Jinsoo Lee, Wook-Shin Han, Romans Kasperovics, and Jeong-Hoon Lee. An in-depth comparison of subgraph isomorphism algorithms in graph databases. *Proceedings of the VLDB Endowment*, 6(2):133–144, December 2012. CODEN ???? ISSN 2150-8097.

Ren:2012:LLM

[791] Kun Ren, Alexander Thomson, and Daniel J. Abadi. Lightweight locking for main memory database systems. *Proceedings of the VLDB Endowment*, 6(2):145–156, December 2012. CODEN ???? ISSN 2150-8097.

Zhang:2013:LPP

[792] Ye Zhang, Wai-Kit Wong, S. M. Yiu, Nikos Mamoulis, and David W. Cheung. Lightweight privacy-preserving peer-to-peer data integration. *Proceedings of the VLDB Endowment*, 6(3): 157–168, January 2013. CODEN ???? ISSN 2150-8097.

Li:2013:MEM

[793] Yang Li, Pegah Kamousi, Fangqiu Han, Shengqi Yang, Xifeng Yan, and Subhash Suri. Memory efficient minimum substring partitioning. *Proceedings of the VLDB Endowment*, 6(3):169–180, January 2013. CODEN ???? ISSN 2150-8097.

Khan:2013:NFG

[794] Arijit Khan, Yinghui Wu, Charu C. Aggarwal, and Xifeng Yan. NeMa: fast graph search with label similarity. *Proceedings of the VLDB Endowment*, 6 (3):181–192, January 2013. CODEN ???? ISSN 2150-8097.

Lin:2013:PPS

[795] Xika Lin, Abhishek Mukherji, Elke A. Rundensteiner, Carolina Ruiz, and Matthew O. Ward. PARAS: a parameter space framework for online association mining. *Proceedings of the VLDB Endowment*, 6(3):193–204, January 2013. CODEN ???? ISSN 2150-8097.

Yan:2013:ASF

[796] Zhepeng Yan, Nan Zheng, Zachary G. Ives, Partha Pratim Talukdar, and Cong Yu. Actively soliciting feedback for query answers in keyword search-based data integration. *Proceedings of the VLDB Endowment*, 6(3):205–216, January 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:SKQ

[797] Lisi Chen, Gao Cong, Christian S. Jensen, and Dingming Wu. Spatial keyword query processing: an experimental evaluation. *Proceedings of the VLDB Endowment*, 6(3):217–228, January 2013. CODEN ???? ISSN 2150-8097.

Eftekhar:2013:PRT

[798] Milad Eftekhar and Nick Koudas. Partitioning and ranking tagged data sources. *Proceedings of the VLDB Endowment*, 6(4):229–240, February 2013. CODEN ???? ISSN 2150-8097.

Badia:2013:EIG

[799] Antonio Badia and Bin Cao. Efficient implementation of generalized quantification in relational query languages. *Proceedings of the VLDB Endowment*, 6(4):241–252, February 2013. CODEN ???? ISSN 2150-8097.

Liu:2013:DWD

[800] Rui Liu, Ashraf Aboulnaga, and Kenneth Salem. DAX: a widely distributed multitenant storage service for DBMS hosting. *Proceedings of the VLDB Endowment*, 6(4):253–264, February 2013. CODEN ???? ISSN 2150-8097.

Zeng:2013:DGE

[801] Kai Zeng, Jiacheng Yang, Haixun Wang, Bin Shao, and Zhongyuan Wang. A distributed graph engine for web scale RDF data. *Proceedings of the VLDB Endowment*, 6(4):265–276, February 2013. CODEN ???? ISSN 2150-8097.

Sarma:2013:ULB

[802] Anish Das Sarma, Foto N. Afrati, Semih Salihoglu, and Jeffrey D. Ullman. Upper and lower bounds on the cost of a map-reduce computation. *Proceedings of the VLDB Endowment*, 6 (4):277–288, February 2013. CODEN ???? ISSN 2150-8097.

Tu:2013:PAQ

[803] Stephen Tu, M. Frans Kaashoek, Samuel Madden, and Nickolai Zeldovich. Processing analytical queries over encrypted data. *Proceedings of the VLDB Endowment*, 6(5):289–300, March 2013. CODEN ???? ISSN 2150-8097.

Kellaris:2013:PDP

[804] Georgios Kellaris and Stavros Papadopoulos. Practical differential privacy via grouping and smoothing. *Proceedings of the VLDB Endowment*, 6 (5):301–312, March 2013. CODEN ???? ISSN 2150-8097.

Kaushik:2013:SSD

[805] Raghav Kaushik, Yupeng Fu, and Ravishankar Ramamurthy. On scaling up sensitive data auditing. *Proceedings of the VLDB Endowment*, 6(5):313–324, March 2013. CODEN ???? ISSN 2150-8097.

Sathiamoorthy:2013:XEN

[806] Maheswaran Sathiamoorthy, Megasthenis Asteris, Dimitris Papailiopoulos, Alexandros G. Dimakis, Ramkumar Vadali, Scott Chen, and Dhruba Borthakur. XORing elephants: novel erasure codes for big data. *Proceedings of the VLDB Endowment*, 6(5): 325–336, March 2013. CODEN ???? ISSN 2150-8097.

Rendle:2013:SFM

[807] Steffen Rendle. Scaling factorization machines to relational data. *Proceedings of the VLDB Endowment*, 6(5): 337–348, March 2013. CODEN ???? ISSN 2150-8097.

Whang:2013:QSC

[808] Steven Euijong Whang, Peter Lofgren, and Hector Garcia-Molina. Question selection for crowd entity resolution. *Proceedings of the VLDB Endowment*, 6(6):349–360, April 2013. CODEN ???? ISSN 2150-8097.

Jindal:2013:CKB

[809] Alekh Jindal, Endre Palatinus, Vladimir Pavlov, and Jens Dittrich. A comparison of knives for bread slicing. *Proceedings of the VLDB Endowment*, 6 (6):361–372, April 2013. CODEN ???? ISSN 2150-8097.

Xiao:2013:EET

[810] Chuan Xiao, Jianbin Qin, Wei Wang, Yoshiharu Ishikawa, Koji Tsuda, and Kunihiko Sadakane. Efficient error-tolerant query autocompletion. *Proceedings of the VLDB Endowment*, 6 (6):373–384, April 2013. CODEN ???? ISSN 2150-8097.

Shraer:2013:TKP

[811] Alexander Shraer, Maxim Gurevich, Marcus Fontoura, and Vanja Josifovski. Top-k publish-subscribe for social annotation of news. *Proceedings of the VLDB Endowment*, 6(6):385–396, April 2013. CODEN ???? ISSN 2150-8097.

Kolaitis:2013:EQI

[812] Phokion G. Kolaitis, Enela Pema, and Wang-Chiew Tan. Efficient querying

of inconsistent databases with binary integer programming. *Proceedings of the VLDB Endowment*, 6(6):397–408, April 2013. CODEN ???? ISSN 2150-8097.

Gionis:2013:PSN

[813] Aristides Gionis, Flavio Junqueira, Vincent Leroy, Marco Serafini, and Ingmar Weber. Piggybacking on social networks. *Proceedings of the VLDB Endowment*, 6(6):409–420, April 2013. CODEN ???? ISSN 2150-8097.

Adelfio:2013:SET

[814] Marco D. Adelfio and Hanan Samet. Schema extraction for tabular data on the Web. *Proceedings of the VLDB Endowment*, 6(6):421–432, April 2013. CODEN ???? ISSN 2150-8097.

Sariyuce:2013:SAK

[815] Ahmet Erdem Saríyüce, Bugra Gedik, Gabriela Jacques-Silva, Kun-Lung Wu, and Ümit V. Çatalyürek. Streaming algorithms for k-core decomposition. *Proceedings of the VLDB Endowment*, 6(6):433–444, April 2013. CODEN ???? ISSN 2150-8097.

Hassanzadeh:2013:DLP

[816] Oktie Hassanzadeh, Ken Q. Pu, Soheil Hassas Yeganeh, Renée J. Miller, Lucian Popa, Mauricio A. Hernández, and Howard Ho. Discovering linkage points over Web data. *Proceedings of the VLDB Endowment*, 6(6):445–456, April 2013. CODEN ???? ISSN 2150-8097.

Fu:2013:LIS

[817] Ada Wai-Chee Fu, Huanhuan Wu, James Cheng, and Raymond Chi-Wing Wong. IS-Label: an independent-set based labeling scheme for point-to-point distance querying. *Proceedings of the VLDB Endowment*, 6(6):457–468, April 2013. CODEN ???? ISSN 2150-8097.

Tran:2013:SUD

[818] Thanh T. L. Tran, Yanlei Diao, Charles Sutton, and Anna Liu. Supporting user-defined functions on uncertain data. *Proceedings of the VLDB Endowment*, 6(6):469–480, April 2013. CODEN ???? ISSN 2150-8097.

Zhu:2013:IAA

[819] Fanwei Zhu, Yuan Fang, Kevin Chen-Chuan Chang, and Jing Ying. Incremental and accuracy-aware Personalized PageRank through scheduled approximation. *Proceedings of the VLDB Endowment*, 6(6):481–492, April 2013. CODEN ???? ISSN 2150-8097.

Zheng:2013:ESB

[820] Weiguo Zheng, Lei Zou, Yansong Feng, Lei Chen, and Dongyan Zhao. Efficient simrank-based similarity join over large graphs. *Proceedings of the VLDB Endowment*, 6(7):493–504, May 2013. CODEN ???? ISSN 2150-8097.

Liu:2013:PST

[821] Guimei Liu, Andre Suchitra, and Limsoon Wong. A performance study of three disk-based structures for indexing and querying frequent itemsets. *Proceedings of the VLDB Endowment*, 6 (7):505–516, May 2013. CODEN ???? ISSN 2150-8097.

Yuan:2013:TFC

[822] Pingpeng Yuan, Pu Liu, Buwen Wu, Hai Jin, Wenya Zhang, and Ling Liu.

TripleBit: a fast and compact system for large scale RDF data. *Proceedings of the VLDB Endowment*, 6(7):517–528, May 2013. CODEN ???? ISSN 2150-8097.

Bajaj:2013:CSE

[823] Sumeet Bajaj and Radu Sion. CorrectDB: SQL engine with practical query authentication. *Proceedings of the VLDB Endowment*, 6(7):529–540, May 2013. CODEN ???? ISSN 2150-8097.

Liu:2013:HSM

[824] Xin Liu and Kenneth Salem. Hybrid storage management for database systems. *Proceedings of the VLDB Endowment*, 6(8):541–552, June 2013. CODEN ???? ISSN 2150-8097.

Wu:2013:SEO

[825] Eugene Wu and Samuel Madden. Scorpion: explaining away outliers in aggregate queries. *Proceedings of the VLDB Endowment*, 6(8):553–564, June 2013. CODEN ???? ISSN 2150-8097.

Gupta:2013:RTQ

[826] Rajeev Gupta, Krithi Ramamritham, and Mukesh Mohania. Ratio threshold queries over distributed data sources. *Proceedings of the VLDB Endowment*, 6(8):565–576, June 2013. CODEN ???? ISSN 2150-8097.

Deng:2013:CQR

[827] Ting Deng and Wenfei Fan. On the complexity of query result diversification. *Proceedings of the VLDB Endowment*, 6(8):577–588, June 2013. CODEN ???? ISSN 2150-8097.

Dutta:2013:SQF

[828] Sourav Dutta, Ankur Narang, and Suman K. Bera. Streaming quotient filter: a near optimal approximate duplicate detection approach for data streams. *Proceedings of the VLDB Endowment*, 6(8):589–600, June 2013. CODEN ???? ISSN 2150-8097.

Korn:2013:RSP

[829] Flip Korn, Barna Saha, Divesh Srivastava, and Shanshan Ying. On repairing structural problems in semi-structured data. *Proceedings of the VLDB Endowment*, 6(9):601–612, July 2013. CODEN ???? ISSN 2150-8097.

Manshadi:2013:DAL

[830] Faraz Makari Manshadi, Baruch Awerbuch, Rainer Gemulla, Rohit Khandekar, Julián Mestre, and Mauro Sozio. A distributed algorithm for large-scale generalized matching. *Proceedings of the VLDB Endowment*, 6(9):613–624, July 2013. CODEN ???? ISSN 2150-8097.

Geerts:2013:LDC

[831] Floris Geerts, Giansalvatore Mecca, Paolo Papotti, and Donatello Santoro. The LLUNATIC data-cleaning framework. *Proceedings of the VLDB Endowment*, 6(9):625–636, July 2013. CODEN ???? ISSN 2150-8097.

Psaroudakis:2013:SDW

[832] Iraklis Psaroudakis, Manos Athanassoulis, and Anastasia Ailamaki. Sharing data and work across concurrent analytical queries. *Proceedings of the VLDB Endowment*, 6(9):637–648, July 2013. CODEN ???? ISSN 2150-8097.

Shang:2013:SOA

[833] Haichuan Shang and Masaru Kitsuregawa. Skyline operator on anti-correlated distributions. *Proceedings of the VLDB Endowment*, 6(9):649–660, July 2013. CODEN ???? ISSN 2150-8097.

Mahmoud:2013:LLM

[834] Hatem Mahmoud, Faisal Nawab, Alexander Pucher, Divyakant Agrawal, and Amr El Abbadi. Low-latency multi-datacenter databases using replicated commit. *Proceedings of the VLDB Endowment*, 6(9):661–672, July 2013. CODEN ???? ISSN 2150-8097.

Chi:2013:DBQ

[835] Yun Chi, Hakan Hacígümüs, Wang-Pin Hsiung, and Jeffrey F. Naughton. Distribution-based query scheduling. *Proceedings of the VLDB Endowment*, 6(9):673–684, July 2013. CODEN ???? ISSN 2150-8097.

Fan:2013:MQT

[836] Wenfei Fan, Floris Geerts, and Frank Neven. Making queries tractable on big data with preprocessing: through the eyes of complexity theory. *Proceedings of the VLDB Endowment*, 6 (9):685–696, July 2013. CODEN ???? ISSN 2150-8097.

Kaplan:2013:APQ

[837] Haim Kaplan, Ilia Lotosh, Tova Milo, and Slava Novgorodov. Answering planning queries with the crowd. *Proceedings of the VLDB Endowment*, 6 (9):697–708, July 2013. CODEN ???? ISSN 2150-8097.

Heimel:2013:HOP

[838] Max Heimel, Michael Saecker, Holger Pirk, Stefan Manegold, and Volker Markl. Hardware-oblivious parallelism for in-memory column-stores. *Proceedings of the VLDB Endowment*, 6(9): 709–720, July 2013. CODEN ???? ISSN 2150-8097.

Thonangi:2013:PDR

[839] Risi Thonangi and Jun Yang. Permuting data on random-access block storage. *Proceedings of the VLDB Endowment*, 6(9):721–732, July 2013. CODEN ???? ISSN 2150-8097.

Stoica:2013:IFW

[840] Radu Stoica and Anastasia Ailamaki. Improving flash write performance by using update frequency. *Proceedings of the VLDB Endowment*, 6(9):733–744, July 2013. CODEN ???? ISSN 2150-8097.

Li:2013:EID

[841] Lu Li and Chee-Yong Chan. Efficient indexing for diverse query results. *Proceedings of the VLDB Endowment*, 6 (9):745–756, July 2013. CODEN ???? ISSN 2150-8097.

Zhang:2013:RUS

[842] Chen Jason Zhang, Lei Chen, H. V. Jagadish, and Chen Caleb Cao. Reducing uncertainty of schema matching via crowdsourcing. *Proceedings of the VLDB Endowment*, 6(9):757–768, July 2013. CODEN ???? ISSN 2150-8097.

Yang:2013:TCI

[843] Bin Yang, Chenjuan Guo, and Christian S. Jensen. Travel cost inference from sparse, spatio temporally correlated time series using Markov models.

Proceedings of the VLDB Endowment, 6(9):769–780, July 2013. CODEN ???? ISSN 2150-8097.

Park:2013:QOC

[844] Hyunjung Park and Jennifer Widom. Query optimization over crowdsourced data. *Proceedings of the VLDB Endowment*, 6(10):781–792, August 2013. CODEN ???? ISSN 2150-8097.

Wang:2013:DAD

[845] Yang Wang, Peng Wang, Jian Pei, Wei Wang, and Sheng Huang. A data-adaptive and dynamic segmentation index for whole matching on time series. *Proceedings of the VLDB Endowment*, 6(10):793–804, August 2013. CODEN ???? ISSN 2150-8097.

Bronzi:2013:EIP

[846] Mirko Bronzi, Valter Crescenzi, Paolo Merialdo, and Paolo Papotti. Extraction and integration of partially overlapping web sources. *Proceedings of the VLDB Endowment*, 6(10):805–816, August 2013. CODEN ???? ISSN 2150-8097.

Yuan:2013:YYP

[847] Yuan Yuan, Rubao Lee, and Xiaodong Zhang. The Yin and Yang of processing data warehousing queries on GPU devices. *Proceedings of the VLDB Endowment*, 6(10):817–828, August 2013. CODEN ???? ISSN 2150-8097.

Yuan:2013:MIG

[848] Dayu Yuan, Prasenjit Mitra, and C. Lee Giles. Mining and indexing graphs for supergraph search. *Proceedings of the VLDB Endowment*, 6(10): 829–840, August 2013. CODEN ???? ISSN 2150-8097.

Wang:2013:ERM

[849] Jianmin Wang, Shaoxu Song, Xiaochen Zhu, and Xuemin Lin. Efficient recovery of missing events. *Proceedings of the VLDB Endowment*, 6(10):841–852, August 2013. CODEN ???? ISSN 2150-8097.

Ren:2013:HAA

[850] Kai Ren, YongChul Kwon, Magdalena Balazinska, and Bill Howe. Hadoop's adolescence: an analysis of Hadoop usage in scientific workloads. *Proceedings of the VLDB Endowment*, 6(10):853–864, August 2013. CODEN ???? ISSN 2150-8097.

Mansour:2013:RSE

[851] Essam Mansour, Ahmed El-Roby, Panos Kalnis, Aron Ahmadia, and Ashraf Aboulnaga. RACE: a scalable and elastic parallel system for discovering repeats in very long sequences. *Proceedings of the VLDB Endowment*, 6(10):865–876, August 2013. CODEN ???? ISSN 2150-8097.

Levandoski:2013:LCS

[852] Justin Levandoski, David Lomet, and Sudipta Sengupta. LLAMA: a cache/storage subsystem for modern hardware. *Proceedings of the VLDB Endowment*, 6(10):877–888, August 2013. CODEN ???? ISSN 2150-8097.

He:2013:RCP

[853] Jiong He, Mian Lu, and Bingsheng He. Revisiting co-processing for hash joins on the coupled CPU–GPU architecture. *Proceedings of the VLDB Endowment*, 6(10):889–900, August 2013. CODEN ???? ISSN 2150-8097.

Qiao:2013:TKN

[854] Miao Qiao, Lu Qin, Hong Cheng, Jeffrey Xu Yu, and Wentao Tian. Top-k nearest keyword search on large graphs. *Proceedings of the VLDB Endowment*, 6(10):901–912, August 2013. CODEN ???? ISSN 2150-8097.

Armenatzoglou:2013:GFG

[855] Nikos Armenatzoglou, Stavros Papadopoulos, and Dimitris Papadias. A general framework for geo-social query processing. *Proceedings of the VLDB Endowment*, 6(10):913–924, August 2013. CODEN ???? ISSN 2150-8097.

Wu:2013:TPQ

[856] Wentao Wu, Yun Chi, Hakan Hacígümüs, and Jeffrey F. Naughton. Towards predicting query execution time for concurrent and dynamic database workloads. *Proceedings of the VLDB Endowment*, 6(10):925–936, August 2013. CODEN ???? ISSN 2150-8097.

Garofalakis:2013:SBG

[857] Minos Garofalakis, Daniel Keren, and Vasilis Samoladas. Sketch-based geometric monitoring of distributed stream queries. *Proceedings of the VLDB Endowment*, 6(10):937–948, August 2013. CODEN ???? ISSN 2150-8097.

Long:2013:DPT

[858] Cheng Long, Raymond Chi-Wing Wong, and H. V. Jagadish. Direction-preserving trajectory simplification. *Proceedings of the VLDB Endowment*, 6(10):949–960, August 2013. CODEN ???? ISSN 2150-8097.

Bruno:2013:CCS

[859] Nicolas Bruno, Sapna Jain, and Jingren Zhou. Continuous cloud-scale query optimization and processing. *Proceedings of the VLDB Endowment*, 6(11):961–972, August 2013. CODEN ???? ISSN 2150-8097.

Cherniak:2013:OSB

[860] Andrii Cherniak, Huma Zaidi, and Vladimir Zadorozhny. Optimization strategies for A/B testing on HADOOP. *Proceedings of the VLDB Endowment*, 6(11):973–984, August 2013. CODEN ???? ISSN 2150-8097.

Elmeleegy:2013:POS

[861] Khaled Elmeleegy. Piranha: optimizing short jobs in Hadoop. *Proceedings of the VLDB Endowment*, 6(11):985–996, August 2013. CODEN ???? ISSN 2150-8097.

Sadoghi:2013:MUD

[862] Mohammad Sadoghi, Kenneth A. Ross, Mustafa Canim, and Bishwaranjan Bhattacharjee. Making updates disk-I/O friendly using SSDs. *Proceedings of the VLDB Endowment*, 6(11):997–1008, August 2013. CODEN ???? ISSN 2150-8097.

Aji:2013:HGH

[863] Ablimit Aji, Fusheng Wang, Hoang Vo, Rubao Lee, Qiaoling Liu, Xiaodong Zhang, and Joel Saltz. Hadoop GIS: a high performance spatial data warehousing system over MapReduce. *Proceedings of the VLDB Endowment*, 6 (11):1009–1020, August 2013. CODEN ???? ISSN 2150-8097.

Bamba:2013:SCO

[864] Bhuvan Bamba, Siva Ravada, Ying Hu, and Richard Anderson. Statistics collection in Oracle Spatial and Graph: fast histogram construction for complex geometry objects. *Proceedings of the VLDB Endowment*, 6(11):1021–1032, August 2013. CODEN ???? ISSN 2150-8097.

Akidau:2013:MFT

[865] Tyler Akidau, Alex Balikov, Kaya Bekiroglu, Slava Chernyak, Josh Haberman, Reuven Lax, Sam McVeety, Daniel Mills, Paul Nordstrom, and Sam Whittle. MillWheel: fault-tolerant stream processing at Internet scale. *Proceedings of the VLDB Endowment*, 6(11):1033–1044, August 2013. CODEN ???? ISSN 2150-8097.

Rae:2013:OAS

[866] Ian Rae, Eric Rollins, Jeff Shute, Sukhdeep Sodhi, and Radek Vingralek. Online, asynchronous schema change in F1. *Proceedings of the VLDB Endowment*, 6(11):1045–1056, August 2013. CODEN ???? ISSN 2150-8097.

Abraham:2013:SDD

[867] Lior Abraham, John Allen, Oleksandr Barykin, Vinayak Borkar, Bhuwan Chopra, Ciprian Gerea, Daniel Merl, Josh Metzler, David Reiss, Subbu Subramanian, Janet L. Wiener, and Okay Zed. Scuba: diving into data at Facebook. *Proceedings of the VLDB Endowment*, 6(11):1057–1067, August 2013. CODEN ???? ISSN 2150-8097.

Shute:2013:FDS

[868] Jeff Shute, Radek Vingralek, Bart Samwel, Ben Handy, Chad Whipkey, Eric Rollins, Mircea Oancea, Kyle Littlefield, David Menestrina, Stephan Ellner, John Cieslewicz, Ian Rae, Traian Stancescu, and Himani Apte. F1: a distributed SQL database that scales. *Proceedings of the VLDB Endowment*, 6(11):1068–1079, August 2013. CODEN ???? ISSN 2150-8097.

Raman:2013:DBA

[869] Vijayshankar Raman, Gopi Attaluri, Ronald Barber, Naresh Chainani, David Kalmuk, Vincent KulandaiSamy, Jens Leenstra, Sam Lightstone, Shaorong Liu, Guy M. Lohman, Tim Malkemus, Rene Mueller, Ippokratis Pandis, Berni Schiefer, David Sharpe, Richard Sidle, Adam Storm, and Liping Zhang. DB2 with BLU acceleration: so much more than just a column store. *Proceedings of the VLDB Endowment*, 6(11):1080–1091, August 2013. CODEN ???? ISSN 2150-8097.

Ovsiannikov:2013:QFS

[870] Michael Ovsiannikov, Silvius Rus, Damian Reeves, Paul Sutter, Sriram Rao, and Jim Kelly. The Quantcast File System. *Proceedings of the VLDB Endowment*, 6(11):1092–1101, August 2013. CODEN ???? ISSN 2150-8097.

Bellamkonda:2013:ABD

[871] Srikanth Bellamkonda, Hua-Gang Li, Unmesh Jagtap, Yali Zhu, Vince Liang, and Thierry Cruanes. Adaptive and big data scale parallel execution in Oracle. *Proceedings of the VLDB Endowment*, 6(11):1102–1113, August 2013. CODEN ???? ISSN 2150-8097.

Bellare:2013:WSM

[872] Kedar Bellare, Carlo Curino, Ashwin Machanavajihala, Peter Mika, Mandar

Rahurkar, and Aamod Sane. WOO: a scalable and multi-tenant platform for continuous knowledge base synthesis. *Proceedings of the VLDB Endowment*, 6(11):1114–1125, August 2013. CODEN ???? ISSN 2150-8097.

Gattani:2013:EEL

[873] Abhishek Gattani, Digvijay S. Lamba, Nikesh Garera, Mitul Tiwari, Xiaoyong Chai, Sanjib Das, Sri Subramaniam, Anand Rajaraman, Venky Harinarayan, and AnHai Doan. Entity extraction, linking, classification, and tagging for social media: a Wikipedia-based approach. *Proceedings of the VLDB Endowment*, 6(11):1126–1137, August 2013. CODEN ???? ISSN 2150-8097.

Elmeleegy:2013:OTD

[874] Hazem Elmeleegy, Yinan Li, Yan Qi, Peter Wilmot, Mingxi Wu, Santanu Kolay, Ali Dasdan, and Songting Chen. Overview of turn data management platform for digital advertising. *Proceedings of the VLDB Endowment*, 6 (11):1138–1149, August 2013. CODEN ???? ISSN 2150-8097.

Curtiss:2013:USS

[875] Michael Curtiss, Iain Becker, Tudor Bosman, Sergey Doroshenko, Lucian Grijincu, Tom Jackson, Sandhya Kunnatur, Soren Lassen, Philip Pronin, Sriram Sankar, Guanghao Shen, Gintaras Woss, Chao Yang, and Ning Zhang. Unicorn: a system for searching the social graph. *Proceedings of the VLDB Endowment*, 6(11):1150–1161, August 2013. CODEN ???? ISSN 2150-8097.

Ramazzina:2013:NSC

[876] Sergio Ramazzina, Chiara L. Ballari, and Daniela Somenzi. A new service for customer care based on the Trentorise bigdata platform. *Proceedings of the VLDB Endowment*, 6(11):1162–1163, August 2013. CODEN ???? ISSN 2150-8097.

Antonelli:2013:EDM

[877] Fabrizio Antonelli, Antonino Casella, Cristiana Chitic, Roberto Larcher, and Giovanni Torrisi. Exploiting the diversity, mass and speed of territorial data by TELCO Operator for better user services. *Proceedings of the VLDB Endowment*, 6(11):1164–1165, August 2013. CODEN ???? ISSN 2150-8097.

Bedini:2013:TBD

[878] Ivan Bedini, Benedikt Elser, and Yannis Velegrakis. The Trento big data platform for public administration and large companies: use cases and opportunities. *Proceedings of the VLDB Endowment*, 6(11):1166–1167, August 2013. CODEN ???? ISSN 2150-8097.

Tran:2013:DQO

[879] Nga Tran, Sreenath Bodagala, and Jaimin Dave. Designing query optimizers for big data problems of the future. *Proceedings of the VLDB Endowment*, 6(11):1168–1169, August 2013. CODEN ???? ISSN 2150-8097.

Franceschini:2013:HMV

[880] Monica Franceschini. How to maximize the value of big data with the open source SpagoBI suite through a comprehensive approach. *Proceedings of the VLDB Endowment*, 6(11):1170–1171, August 2013. CODEN ???? ISSN 2150-8097.

Chang:2013:CAC

[881] Edward Y. Chang. Context-aware computing: opportunities and open issues. *Proceedings of the VLDB Endowment*, 6(11):1172–1173, August 2013. CODEN ???? ISSN 2150-8097.

Hassanzadeh:2013:NGD

[882] Oktie Hassanzadeh, Anastasios Kementsietsidis, Benny Kimelfeld, Rajasekar Krishnamurthy, Fatma Özcan, and Ippokratis Pandis. Next generation data analytics at IBM research. *Proceedings of the VLDB Endowment*, 6 (11):1174–1175, August 2013. CODEN ???? ISSN 2150-8097.

Brunato:2013:LIO

[883] Mauro Brunato and Roberto Battiti. Learning and intelligent optimization (LION): one ring to rule them all. *Proceedings of the VLDB Endowment*, 6 (11):1176–1177, August 2013. CODEN ???? ISSN 2150-8097.

Lomet:2013:MSS

[884] David Lomet. Microsoft SQL server's integrated database approach for modern applications and hardware. *Proceedings of the VLDB Endowment*, 6 (11):1178–1179, August 2013. CODEN ???? ISSN 2150-8097.

Hacigumus:2013:OMS

[885] Hakan Hacígümüs, Jagan Sankaranarayanan, Junichi Tatemura, Jeff LeFevre, and Neoklis Polyzotis. Odyssey: a multistore system for evolutionary analytics. *Proceedings of the VLDB Endowment*, 6(11):1180–1181, August 2013. CODEN ???? ISSN 2150-8097.

Bouquet:2013:GEN

[886] Paolo Bouquet and Andrea Molinari. A global Entity Name System (ENS) for data ecosystems. *Proceedings of the VLDB Endowment*, 6(11):1182–1183, August 2013. CODEN ???? ISSN 2150-8097.

Sikka:2013:SHE

[887] Vishal Sikka, Franz Färber, Anil Goel, and Wolfgang Lehner. SAP HANA: the evolution from a modern main-memory data platform to an enterprise application platform. *Proceedings of the VLDB Endowment*, 6(11):1184–1185, August 2013. CODEN ???? ISSN 2150-8097.

Nambiar:2013:KTR

[888] Raghunath Nambiar and Meikel Poess. Keeping the TPC relevant! *Proceedings of the VLDB Endowment*, 6(11):1186–1187, August 2013. CODEN ???? ISSN 2150-8097.

Dong:2013:BDI

[889] Xin Luna Dong and Divesh Srivastava. Big data integration. *Proceedings of the VLDB Endowment*, 6(11):1188–1189, August 2013. CODEN ???? ISSN 2150-8097.

Viglas:2013:JTC

[890] Stratis D. Viglas. Just-in-time compilation for SQL query processing. *Proceedings of the VLDB Endowment*, 6(11): 1190–1191, August 2013. CODEN ???? ISSN 2150-8097.

Ailamaki:2013:TST

[891] Anastasia Ailamaki, Ryan Johnson, Ippokratis Pandis, and Pínar Tözün. Toward scalable transaction processing: evolution of Shore-MT. *Proceedings*

of the VLDB Endowment, 6(11):1192–1193, August 2013. CODEN ???? ISSN 2150-8097.

Elmore:2013:TDV

[892] Aaron J. Elmore, Carlo Curino, Divyakant Agrawal, and Amr El Abbadi. Towards database virtualization for database as a service. *Proceedings of the VLDB Endowment*, 6(11):1194–1195, August 2013. CODEN ???? ISSN 2150-8097.

Mokbel:2013:MSN

[893] Mohamed F. Mokbel and Mohamed Sarwat. Mobility and social networking: a data management perspective. *Proceedings of the VLDB Endowment*, 6(11):1196–1197, August 2013. CODEN ???? ISSN 2150-8097.

Xue:2013:DSD

[894] Andy Yuan Xue, Rui Zhang, Yu Zheng, Xing Xie, Jianhui Yu, and Yong Tang. DesTeller: a system for destination prediction based on trajectories with privacy protection. *Proceedings of the VLDB Endowment*, 6(12):1198–1201, August 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:SPS

[895] Zhe Chen, Michael Cafarella, Jun Chen, Daniel Prevo, and Junfeng Zhuang. Senbazuru: a prototype spreadsheet database management system. *Proceedings of the VLDB Endowment*, 6(12):1202–1205, August 2013. CODEN ???? ISSN 2150-8097.

Smits:2013:RFQ

[896] Grégory Smits, Olivier Pivert, and Thomas Girault. ReqFlex: fuzzy queries for everyone. *Proceedings of the VLDB Endowment*, 6(12):1206–1209, August 2013. CODEN ???? ISSN 2150-8097.

Kaufmann:2013:CIT

[897] Martin Kaufmann, Panagiotis Vagenas, Peter M. Fischer, Donald Kossmann, and Franz Färber. Comprehensive and interactive temporal query processing with SAP HANA. *Proceedings of the VLDB Endowment*, 6(12):1210–1213, August 2013. CODEN ???? ISSN 2150-8097.

Grust:2013:FDT

[898] Torsten Grust, Nils Schweinsberg, and Alexander Ulrich. Functions are data too: defunctionalization for PL/SQL. *Proceedings of the VLDB Endowment*, 6(12):1214–1217, August 2013. CODEN ???? ISSN 2150-8097.

Ebaid:2013:NGD

[899] Amr Ebaid, Ahmed Elmagarmid, Ihab F. Ilyas, Mourad Ouzzani, Jorge-Arnulfo Quiane-Ruiz, Nan Tang, and Si Yin. NADEEF: a generalized data cleaning system. *Proceedings of the VLDB Endowment*, 6(12):1218–1221, August 2013. CODEN ???? ISSN 2150-8097.

Bergamaschi:2013:QKS

[900] Sonia Bergamaschi, Francesco Guerra, Matteo Interlandi, Raquel Trillo-Lado, and Yannis Velegrakis. QUEST: a keyword search system for relational data based on semantic and machine learning techniques. *Proceedings of the VLDB Endowment*, 6(12):1222–1225, August 2013. CODEN ???? ISSN 2150-8097.

Bogh:2013:GNA

[901] Kenneth S. Bøgh, Anders Skovsgaard, and Christian S. Jensen. GroupFinder: a new approach to top-k point-of-interest group retrieval. *Proceedings of the VLDB Endowment*, 6(12):1226–1229, August 2013. CODEN ???? ISSN 2150-8097.

Eldawy:2013:DSE

[902] Ahmed Eldawy and Mohamed F. Mokbel. A demonstration of SpatialHadoop: an efficient MapReduce framework for spatial data. *Proceedings of the VLDB Endowment*, 6(12):1230–1233, August 2013. CODEN ???? ISSN 2150-8097.

Abbasoglu:2013:APC

[903] Mehmet Ali Abbasoglu, Bugra Gedik, and Hakan Ferhatosmanoglu. Aggregate profile clustering for telco analytics. *Proceedings of the VLDB Endowment*, 6(12):1234–1237, August 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:RRO

[904] Luying Chen, Stefano Ortona, Giorgio Orsi, and Michael Benedikt. ROSeAnn: reconciling opinions of semantic annotators. *Proceedings of the VLDB Endowment*, 6(12):1238–1241, August 2013. CODEN ???? ISSN 2150-8097.

Sarwat:2013:RAR

[905] Mohamed Sarwat, James Avery, and Mohamed F. Mokbel. RecDB in action: recommendation made easy in relational databases. *Proceedings of the VLDB Endowment*, 6(12):1242–1245, August 2013. CODEN ???? ISSN 2150-8097.

Drosou:2013:PTE

[906] Marina Drosou and Evaggelia Pitoura. POIKILO: a tool for evaluating the results of diversification models and algorithms. *Proceedings of the VLDB Endowment*, 6(12):1246–1249, August 2013. CODEN ???? ISSN 2150-8097.

Amsterdamer:2013:CMA

[907] Yael Amsterdamer, Yael Grossman, Tova Milo, and Pierre Senellart. CrowdMiner: mining association rules from the crowd. *Proceedings of the VLDB Endowment*, 6(12):1250–1253, August 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:TTR

[908] Chen Chen, Hongzhi Yin, Junjie Yao, and Bin Cui. TeRec: a temporal recommender system over tweet stream. *Proceedings of the VLDB Endowment*, 6 (12):1254–1257, August 2013. CODEN ???? ISSN 2150-8097.

Shkapsky:2013:GQN

[909] Alexander Shkapsky, Kai Zeng, and Carlo Zaniolo. Graph queries in a next-generation Datalog system. *Proceedings of the VLDB Endowment*, 6(12):1258–1261, August 2013. CODEN ???? ISSN 2150-8097.

Hendawi:2013:IFS

[910] Abdeltawab M. Hendawi, Jie Bao, and Mohamed F. Mokbel. iRoad: a framework for scalable predictive query processing on road networks. *Proceedings of the VLDB Endowment*, 6(12):1262–1265, August 2013. CODEN ???? ISSN 2150-8097.

Nagendra:2013:SFS

[911] Mithila Nagendra and K. Selçuk Candan. SkySuite: a framework of skyline-join operators for static and stream environments. *Proceedings of the VLDB Endowment*, 6(12):1266–1269, August 2013. CODEN ???? ISSN 2150-8097.

Zhong:2013:PGP

[912] Jianlong Zhong and Bingsheng He. Parallel graph processing on graphics processors made easy. *Proceedings of the VLDB Endowment*, 6(12):1270–1273, August 2013. CODEN ???? ISSN 2150-8097.

Richter:2013:MAO

[913] Stefan Richter, Jens Dittrich, Stefan Schuh, and Tobias Frey. Mosquito: another one bites the data upload stream. *Proceedings of the VLDB Endowment*, 6(12):1274–1277, August 2013. CODEN ???? ISSN 2150-8097.

Hardock:2013:NDS

[914] Sergej Hardock, Ilia Petrov, Robert Gottstein, and Alejandro Buchmann. NoFTL: database systems on FTL-less flash storage. *Proceedings of the VLDB Endowment*, 6(12):1278–1281, August 2013. CODEN ???? ISSN 2150-8097.

Kotsakos:2013:SUS

[915] Dimitrios Kotsakos, Panos Sakkos, Vana Kalogeraki, and Dimitirios Gunopulos. SmartMonitor: using smart devices to perform structural health monitoring. *Proceedings of the VLDB Endowment*, 6(12):1282–1285, August 2013. CODEN ???? ISSN 2150-8097.

Kargin:2013:LEA

[916] Yagíz Kargín, Milena Ivanova, Ying Zhang, Stefan Manegold, and Martin Kersten. Lazy ETL in action: ETL technology dates scientific data. *Proceedings of the VLDB Endowment*, 6 (12):1286–1289, August 2013. CODEN ???? ISSN 2150-8097.

Dayan:2013:EED

[917] Niv Dayan, Martin Kjær Svendsen, Matias Bjørling, Philippe Bonnet, and Luc Bouganim. EagleTree: exploring the design space of SSD-based algorithms. *Proceedings of the VLDB Endowment*, 6(12):1290–1293, August 2013. CODEN ???? ISSN 2150-8097.

Sathe:2013:EPQ

[918] Saket Sathe, Arthur Oviedo, Dipanjan Chakraborty, and Karl Aberer. EnviroMeter: a platform for querying community-sensed data. *Proceedings of the VLDB Endowment*, 6(12):1294–1297, August 2013. CODEN ???? ISSN 2150-8097.

Okcan:2013:SEA

[919] Alper Okcan, Mirek Riedewald, Biswanath Panda, and Daniel Fink. Scolopax: exploratory analysis of scientific data. *Proceedings of the VLDB Endowment*, 6(12):1298–1301, August 2013. CODEN ???? ISSN 2150-8097.

Deutch:2013:PPA

[920] Daniel Deutch, Yuval Moskovitch, and Val Tannen. PROPOLIS: provisioned analysis of data-centric processes. *Proceedings of the VLDB Endowment*, 6 (12):1302–1305, August 2013. CODEN ???? ISSN 2150-8097.

Konda:2013:FSE

[921] Pradap Konda, Arun Kumar, Christopher Ré, and Vaishnavi Sashikanth. Feature selection in enterprise analytics: a demonstration using an R-based data analytics system. *Proceedings of the VLDB Endowment*, 6(12):1306–1309, August 2013. CODEN ???? ISSN 2150-8097.

Najafi:2013:FQP

[922] Mohammadreza Najafi, Mohammad Sadoghi, and Hans-Arno Jacobsen. Flexible query processor on FPGAs. *Proceedings of the VLDB Endowment*, 6(12):1310–1313, August 2013. CODEN ???? ISSN 2150-8097.

Civili:2013:MSM

[923] Cristina Civili, Marco Console, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Lorenzo Lepore, Riccardo Mancini, Antonella Poggi, Riccardo Rosati, Marco Ruzzi, Valerio Santarelli, and Domenico Fabio Savo. MASTRO STUDIO: managing ontology-based data access applications. *Proceedings of the VLDB Endowment*, 6(12):1314–1317, August 2013. CODEN ???? ISSN 2150-8097.

Fuhry:2013:PHP

[924] David Fuhry, Yang Zhang, Venu Satuluri, Arnab Nandi, and Srinivasan Parthasarathy. PLASMA-HD: probing the lattice structure and makeup of high-dimensional data. *Proceedings of the VLDB Endowment*, 6(12):1318–1321, August 2013. CODEN ???? ISSN 2150-8097.

Moyers:2013:DIP

[925] Matthew Moyers, Emad Soroush, Spencer C. Wallace, Simon Krughoff, Jake Vanderplas, Magdalena Balazinska, and Andrew Connolly. A demonstration of iterative parallel array processing in support of telescope image analysis. *Proceedings of the VLDB Endowment*, 6(12):1322–1325, August 2013. CODEN ???? ISSN 2150-8097.

Abdelhaq:2013:EOL

[926] Hamed Abdelhaq, Christian Sengstock, and Michael Gertz. EvenTweet: online localized event detection from Twitter. *Proceedings of the VLDB Endowment*, 6(12):1326–1329, August 2013. CODEN ???? ISSN 2150-8097.

Mousavi:2013:ITM

[927] Hamid Mousavi, Shi Gao, and Carlo Zaniolo. IBminer: a text mining tool for constructing and populating InfoBox databases and knowledge bases. *Proceedings of the VLDB Endowment*, 6(12):1330–1333, August 2013. CODEN ???? ISSN 2150-8097.

Farnan:2013:PPA

[928] Nicholas L. Farnan, Adam J. Lee, Panos K. Chrysanthis, and Ting Yu. PAQO: a preference-aware query optimizer for PostgreSQL. *Proceedings of the VLDB Endowment*, 6(12):1334–1337, August 2013. CODEN ???? ISSN 2150-8097.

Bothe:2013:EPS

[929] Suvarna Bothe, Panagiotis Karras, and Akrivi Vlachou. eSkyline: processing skyline queries over encrypted data. *Proceedings of the VLDB Endowment*, 6(12):1338–1341, August 2013. CODEN ???? ISSN 2150-8097.

Jiang:2013:GMD

[930] Lilong Jiang, Michael Mandel, and Arnab Nandi. GestureQuery: a mul-

titouch database query interface. *Proceedings of the VLDB Endowment*, 6 (12):1342–1345, August 2013. CODEN ???? ISSN 2150-8097.

Yang:2013:MLP

[931] Di Yang, Kaiyu Zhao, Maryam Hasan, Hanyuan Lu, Elke Rundensteiner, and Matthew Ward. Mining and linking patterns across live data streams and stream archives. *Proceedings of the VLDB Endowment*, 6(12):1346–1349, August 2013. CODEN ???? ISSN 2150-8097.

Samet:2013:PMQ

[932] Hanan Samet, Marco D. Adelfio, Brendan C. Fruin, Michael D. Lieberman, and Jagan Sankaranarayanan. PhotoStand: a map query interface for a database of news photos. *Proceedings of the VLDB Endowment*, 6(12):1350–1353, August 2013. CODEN ???? ISSN 2150-8097.

Kumar:2013:HSH

[933] K. Ashwin Kumar, Jonathan Gluck, Amol Deshpande, and Jimmy Lin. Hone: “Scaling down” Hadoop on shared-memory systems. *Proceedings of the VLDB Endowment*, 6(12):1354–1357, August 2013. CODEN ???? ISSN 2150-8097.

Antenucci:2013:RGN

[934] Dolan Antenucci, Erdong Li, Shaobo Liu, Bochun Zhang, Michael J. Cafarella, and Christopher Ré. Ringtail: a generalized nowcasting system. *Proceedings of the VLDB Endowment*, 6 (12):1358–1361, August 2013. CODEN ???? ISSN 2150-8097.

Xie:2013:IIP

[935] Min Xie, Laks V. S. Lakshmanan, and Peter T. Wood. IPS: an interactive package configuration system for trip planning. *Proceedings of the VLDB Endowment*, 6(12):1362–1365, August 2013. CODEN ???? ISSN 2150-8097.

Zhou:2013:RDS

[936] Jingbo Zhou, Anthony K. H. Tung, Wei Wu, and Wee Siong Ng. R2-D2: a system to support probabilistic path prediction in dynamic environments via “Semi-lazy” learning. *Proceedings of the VLDB Endowment*, 6 (12):1366–1369, August 2013. CODEN ???? ISSN 2150-8097.

Chun:2013:RRE

[937] Byung-Gon Chun, Tyson Condie, Carlo Curino, Chris Douglas, Sergiy Matusevych, Brandon Myers, Shravan Narayanamurthy, Raghu Ramakrishnan, Sriram Rao, Josh Rosen, Russell Sears, and Markus Weimer. REEF: retainable evaluator execution framework. *Proceedings of the VLDB Endowment*, 6(12):1370–1373, August 2013. CODEN ???? ISSN 2150-8097.

Zhang:2013:OTP

[938] Shuhao Zhang, Jiong He, Bingsheng He, and Mian Lu. OmniDB: towards portable and efficient query processing on parallel CPU/GPU architectures. *Proceedings of the VLDB Endowment*, 6(12):1374–1377, August 2013. CODEN ???? ISSN 2150-8097.

Savkovic:2013:CAI

[939] Ognjen Savković, Paramita Mirza, Alex Tomasi, and Werner Nutt. Complete approximations of incomplete

queries. *Proceedings of the VLDB Endowment*, 6(12):1378–1381, August 2013. CODEN ???? ISSN 2150-8097.

Koutrika:2013:UAU

[940] Georgia Koutrika, Qian Lin, and Jerry Liu. User analytics with UbeOne: insights into web printing. *Proceedings of the VLDB Endowment*, 6(12):1382–1385, August 2013. CODEN ???? ISSN 2150-8097.

Santos:2013:DDS

[941] Ivo Santos, Marcel Tilly, Badrish Chandramouli, and Jonathan Goldstein. DiAl: distributed streaming analytics anywhere, anytime. *Proceedings of the VLDB Endowment*, 6(12):1386–1389, August 2013. CODEN ???? ISSN 2150-8097.

Chirkova:2013:BUW

[942] Rada Chirkova and Jun Yang. Big and useful: what's in the data for me? *Proceedings of the VLDB Endowment*, 6 (12):1390–1391, August 2013. CODEN ???? ISSN 2150-8097.

Bartos:2013:UIA

[943] Tomás Bartos. Universal indexing of arbitrary similarity models. *Proceedings of the VLDB Endowment*, 6(12): 1392–1397, August 2013. CODEN ???? ISSN 2150-8097.

Bress:2013:WIT

[944] Sebastian Breß and Gunter Saake. Why it is time for a HyPE: a hybrid query processing engine for efficient GPU coprocessing in DBMS. *Proceedings of the VLDB Endowment*, 6(12):1398–1403, August 2013. CODEN ???? ISSN 2150-8097.

Mahdiraji:2013:DSU

[945] Alireza Rezaei Mahdiraji and Peter Baumann. Database support for unstructured meshes. *Proceedings of the VLDB Endowment*, 6(12):1404–1409, August 2013. CODEN ???? ISSN 2150-8097.

Madaan:2013:DSM

[946] Aastha Madaan and Subhash Bhalla. Domain specific multistage query language for medical document repositories. *Proceedings of the VLDB Endowment*, 6(12):1410–1415, August 2013. CODEN ???? ISSN 2150-8097.

Taxidou:2013:RAI

[947] Io Taxidou and Peter Fischer. Realtime analysis of information diffusion in social media. *Proceedings of the VLDB Endowment*, 6(12):1416–1421, August 2013. CODEN ???? ISSN 2150-8097.

Bonomi:2013:MFP

[948] Luca Bonomi and Li Xiong. Mining frequent patterns with differential privacy. *Proceedings of the VLDB Endowment*, 6(12):1422–1427, August 2013. CODEN ???? ISSN 2150-8097.

Hoppe:2013:AOB

[949] Anett Hoppe, C. Nicolle, and A. Roxin. Automatic ontology-based user profile learning from heterogeneous Web resources in a big data context. *Proceedings of the VLDB Endowment*, 6(12): 1428–1433, August 2013. CODEN ???? ISSN 2150-8097.

Dey:2013:STA

[950] Akon Dey, Alan Fekete, and Uwe Röhm. Scalable transactions across heterogeneous NoSQL key–value data

stores. *Proceedings of the VLDB Endowment*, 6(12):1434–1439, August 2013. CODEN ???? ISSN 2150-8097.

Ngo:2013:GUS

[951] Nhung Ngo and Enrico Franconi. Getting unique solution in data exchange. *Proceedings of the VLDB Endowment*, 6(12):1440–1443, August 2013. CODEN ???? ISSN 2150-8097.

Kaufmann:2013:SPT

[952] Martin Kaufmann and Donald Kossmann. Storing and processing temporal data in a main memory column store. *Proceedings of the VLDB Endowment*, 6(12):1444–1449, August 2013. CODEN ???? ISSN 2150-8097.

Kozak:2013:ESS

[953] Stepan Kozak and Pavel Zezula. Efficiency and security in similarity cloud services. *Proceedings of the VLDB Endowment*, 6(12):1450–1455, August 2013. CODEN ???? ISSN 2150-8097.

Sellam:2013:FCD

[954] Thibault Sellam and Martin Kersten. Fast cartography for data explorers. *Proceedings of the VLDB Endowment*, 6(12):1456–1461, August 2013. CODEN ???? ISSN 2150-8097.

Simoes:2013:WSP

[955] Gonçalo Simões, Helena Galhardas, and Luis Gravano. When speed has a price: fast information extraction using approximate algorithms. *Proceedings of the VLDB Endowment*, 6(13): 1462–1473, August 2013. CODEN ???? ISSN 2150-8097.

Chasseur:2013:DES

[956] Craig Chasseur and Jignesh M. Patel. Design and evaluation of storage organizations for read-optimized main memory databases. *Proceedings of the VLDB Endowment*, 6(13):1474–1485, August 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:ASA

[957] Luying Chen, Stefano Ortona, Giorgio Orsi, and Michael Benedikt. Aggregating semantic annotators. *Proceedings of the VLDB Endowment*, 6(13):1486–1497, August 2013. CODEN ???? ISSN 2150-8097.

Chu:2013:DDC

[958] Xu Chu, Ihab F. Ilyas, and Paolo Papotti. Discovering denial constraints. *Proceedings of the VLDB Endowment*, 6(13):1498–1509, August 2013. CODEN ???? ISSN 2150-8097.

Fan:2013:DTK

[959] Wenfei Fan, Xin Wang, and Yinghui Wu. Diversified top-k graph pattern matching. *Proceedings of the VLDB Endowment*, 6(13):1510–1521, August 2013. CODEN ???? ISSN 2150-8097.

Rao:2013:BNF

[960] Weixiong Rao, Lei Chen, Pan Hui, and Sasu Tarkoma. Bitlist: new full-text index for low space cost and efficient keyword search. *Proceedings of the VLDB Endowment*, 6(13):1522–1533, August 2013. CODEN ???? ISSN 2150-8097.

Wandelt:2013:RSS

[961] Sebastian Wandelt, Johannes Starlinger, Marc Bux, and Ulf Leser. RCSI: scalable similarity search in thousand(s) of genomes. *Proceedings of the VLDB Endowment*, 6(13):1534–1545, August 2013. CODEN ???? ISSN 2150-8097.

Tao:2013:AMS

[962] Yufei Tao, Xiaocheng Hu, Dong-Wan Choi, and Chin-Wan Chung. Approximate MaxRS in spatial databases. *Proceedings of the VLDB Endowment*, 6 (13):1546–1557, August 2013. CODEN ???? ISSN 2150-8097.

Kimelfeld:2013:MTD

[963] Benny Kimelfeld, Jan Vondrák, and David P. Woodruff. Multi-tuple deletion propagation: approximations and complexity. *Proceedings of the VLDB Endowment*, 6(13):1558–1569, August 2013. CODEN ???? ISSN 2150-8097.

Chandramouli:2013:SDF

[964] Badrish Chandramouli, Suman Nath, and Wenchao Zhou. Supporting distributed feed-following apps over edge devices. *Proceedings of the VLDB Endowment*, 6(13):1570–1581, August 2013. CODEN ???? ISSN 2150-8097.

Thirumuruganathan:2013:RDW

[965] Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Rank discovery from web databases. *Proceedings of the VLDB Endowment*, 6(13):1582–1593, August 2013. CODEN ???? ISSN 2150-8097.

Rekatsinas:2013:SPS

[966] Theodoros Rekatsinas, Amol Deshpande, and Ashwin Machanavajjhala. SPARSI: partitioning sensitive data amongst multiple adversaries. *Proceedings of the VLDB Endowment*, 6(13): 1594–1605, August 2013. CODEN ???? ISSN 2150-8097.

Deng:2013:SCC

[967] Dong Deng, Yu Jiang, Guoliang Li, Jian Li, and Cong Yu. Scalable column concept determination for Web tables using large knowledge bases. *Proceedings of the VLDB Endowment*, 6(13): 1606–1617, August 2013. CODEN ???? ISSN 2150-8097.

Huang:2013:TKS

[968] Xin Huang, Hong Cheng, Rong-Hua Li, Lu Qin, and Jeffrey Xu Yu. top-k structural diversity search in large networks. *Proceedings of the VLDB Endowment*, 6(13):1618–1629, August 2013. CODEN ???? ISSN 2150-8097.

Cavalieri:2013:SCX

[969] Federico Cavalieri, Alessandro Solimando, and Giovanna Guerrini. Synthetising changes in XML documents as PULs. *Proceedings of the VLDB Endowment*, 6(13):1630–1641, August 2013. CODEN ???? ISSN 2150-8097.

Zhang:2013:PQR

[970] Lei Zhang, Thanh Tran, and Achim Rettinger. Probabilistic query rewriting for efficient and effective keyword search on graph data. *Proceedings of the VLDB Endowment*, 6(14):1642–1653, September 2013. CODEN ???? ISSN 2150-8097.

Schaler:2013:QBH

[971] Martin Schäler, Alexander Grebhahn, Reimar Schröter, Sandro Schulze, Veit Köppen, and Gunter Saake. QuEval: beyond high-dimensional indexing à la carte. *Proceedings of the VLDB Endowment*, 6(14):1654–1665, September 2013. CODEN ???? ISSN 2150-8097.

Li:2013:DLL

[972] Yuhong Li, Leong Hou U., Man Lung Yiu, and Zhiguo Gong. Discovering longest-lasting correlation in sequence

databases. *Proceedings of the VLDB Endowment*, 6(14):1666–1677, September 2013. CODEN ???? ISSN 2150-8097.

Popescu:2013:PTP

[973] Adrian Daniel Popescu, Andrey Balmin, Vuk Ercegovac, and Anastasia Ailamaki. PREDIcT: towards predicting the runtime of large scale iterative analytics. *Proceedings of the VLDB Endowment*, 6(14):1678–1689, September 2013. CODEN ???? ISSN 2150-8097.

Zhao:2013:ERW

[974] Xiaohan Zhao, Adelbert Chang, Atish Das Sarma, Haitao Zheng, and Ben Y. Zhao. On the embeddability of random walk distances. *Proceedings of the VLDB Endowment*, 6(14):1690–1701, September 2013. CODEN ???? ISSN 2150-8097.

Muhlbauer:2013:ILM

[975] Tobias Mühlbauer, Wolf Rödiger, Robert Seilbeck, Angelika Reiser, Alfons Kemper, and Thomas Neumann. Instant loading for main memory databases. *Proceedings of the VLDB Endowment*, 6(14):1702–1713, September 2013. CODEN ???? ISSN 2150-8097.

Alexiou:2013:ARF

[976] Karolina Alexiou, Donald Kossmann, and Per-Åke Larson. Adaptive range filters for cold data: avoiding trips to Siberia. *Proceedings of the VLDB Endowment*, 6(14):1714–1725, September 2013. CODEN ???? ISSN 2150-8097.

Chandramouli:2013:SPA

[977] Badrish Chandramouli, Jonathan Goldstein, and Abdul Quamar. Scalable progressive analytics on big data in the Cloud. *Proceedings of the VLDB Endowment*, 6(14):1726–1737, September 2013. CODEN ???? ISSN 2150-8097.

Ogden:2013:SXQ

[978] Peter Ogden, David Thomas, and Peter Pietzuch. Scalable XML query processing using parallel pushdown transducers. *Proceedings of the VLDB Endowment*, 6(14):1738–1749, September 2013. CODEN ???? ISSN 2150-8097.

Huai:2013:UIB

[979] Yin Huai, Siyuan Ma, Rubao Lee, Owen O'Malley, and Xiaodong Zhang. Understanding insights into the basic structure and essential issues of table placement methods in clusters. *Proceedings of the VLDB Endowment*, 6(14):1750–1761, September 2013. CODEN ???? ISSN 2150-8097.

Mottin:2013:POF

[980] Davide Mottin, Alice Marascu, Senjuti Basu Roy, Gautam Das, Themis Palpanas, and Yannis Velegrakis. A probabilistic optimization framework for the empty-answer problem. *Proceedings of the VLDB Endowment*, 6(14):1762–1773, September 2013. CODEN ???? ISSN 2150-8097.

Wu:2013:SAG

[981] Yinghui Wu, Shengqi Yang, Mudhakar Srivatsa, Arun Iyengar, and Xifeng Yan. Summarizing answer graphs induced by keyword queries. *Proceedings of the VLDB Endowment*, 6(14):1774–1785, September 2013. CODEN ???? ISSN 2150-8097.

Duan:2013:SKS

[982] Huizhong Duan, ChengXiang Zhai, Jinxing Cheng, and Abhishek Gattani. Supporting keyword search in product database: a probabilistic approach. *Proceedings of the VLDB Endowment*, 6(14):1786–1797, September 2013. CODEN ???? ISSN 2150-8097.

Nirkhiwale:2013:SAA

[983] Supriya Nirkhiwale, Alin Dobra, and Christopher Jermaine. A sampling algebra for aggregate estimation. *Proceedings of the VLDB Endowment*, 6 (14):1798–1809, September 2013. CODEN ???? ISSN 2150-8097.

Dylla:2013:TPD

[984] Maximilian Dylla, Iris Miliaraki, and Martin Theobald. A temporal-probabilistic database model for information extraction. *Proceedings of the VLDB Endowment*, 6(14):1810–1821, September 2013. CODEN ???? ISSN 2150-8097.

Fender:2013:CSG

[985] Pit Fender and Guido Moerkotte. Counter strike: generic top-down join enumeration for hypergraphs. *Proceedings of the VLDB Endowment*, 6(14): 1822–1833, September 2013. CODEN ???? ISSN 2150-8097.

Achakeev:2013:EBU

[986] Daniar Achakeev and Bernhard Seeger. Efficient bulk updates on multiversion B-trees. *Proceedings of the VLDB Endowment*, 6(14):1834–1845, September 2013. CODEN ???? ISSN 2150-8097.

Altwaijry:2013:QDA

[987] Hotham Altwaijry, Dmitri V. Kalashnikov, and Sharad Mehrotra. Query-driven approach to entity resolution. *Proceedings of the VLDB Endowment*, 6(14):1846–1857, September 2013. CODEN ???? ISSN 2150-8097.

Szlichta:2013:ECO

[988] Jarosław Szlichta, Parke Godfrey, Jarek Gryz, and Calisto Zuzarte. Expressiveness and complexity of order dependencies. *Proceedings of the VLDB Endowment*, 6(14):1858–1869, September 2013. CODEN ???? ISSN 2150-8097.

Pavan:2013:CST

[989] A. Pavan, Kanat Tangwongsan, Srikanta Tirthapura, and Kun-Lung Wu. Counting and sampling triangles from a graph stream. *Proceedings of the VLDB Endowment*, 6(14):1870–1881, September 2013. CODEN ???? ISSN 2150-8097.

Sowell:2013:EAI

[990] Benjamin Sowell, Marcos Vaz Salles, Tuan Cao, Alan Demers, and Johannes Gehrke. An experimental analysis of iterated spatial joins in main memory. *Proceedings of the VLDB Endowment*, 6(14):1882–1893, September 2013. CODEN ???? ISSN 2150-8097.

Lee:2013:SQB

[991] Kisung Lee and Ling Liu. Scaling queries over big RDF graphs with semantic hash partitioning. *Proceedings of the VLDB Endowment*, 6(14):1894–1905, September 2013. CODEN ???? ISSN 2150-8097.

Seo:2013:DSD

[992] Jiwon Seo, Jongsoo Park, Jaeho Shin, and Monica S. Lam. Distributed socialite: a datalog-based language for

large-scale graph analysis. *Proceedings of the VLDB Endowment*, 6(14):1906–1917, September 2013. CODEN ???? ISSN 2150-8097.

Sarwat:2013:HDS

[993] Mohamed Sarwat, Sameh Elnikety, Yuxiong He, and Mohamed F. Mokbel. Horton+: a distributed system for processing declarative reachability queries over partitioned graphs. *Proceedings of the VLDB Endowment*, 6(14):1918–1929, September 2013. CODEN ???? ISSN 2150-8097.

Sundaram:2013:SSS

[994] Narayanan Sundaram, Aizana Turmukhametova, Nadathur Satish, Todd Mostak, Piotr Indyk, Samuel Madden, and Pradeep Dubey. Streaming similarity search over one billion tweets using parallel locality-sensitive hashing. *Proceedings of the VLDB Endowment*, 6 (14):1930–1941, September 2013. CODEN ???? ISSN 2150-8097.

DeBrabant:2013:ACN

[995] Justin DeBrabant, Andrew Pavlo, Stephen Tu, Michael Stonebraker, and Stan Zdonik. Anti-caching: a new approach to database management system architecture. *Proceedings of the VLDB Endowment*, 6(14):1942–1953, September 2013. CODEN ???? ISSN 2150-8097.

Qardaji:2013:UHM

[996] Wahbeh Qardaji, Weining Yang, and Ninghui Li. Understanding hierarchical methods for differentially private histograms. *Proceedings of the VLDB Endowment*, 6(14):1954–1965, September 2013. CODEN ???? ISSN 2150-8097.

Li:2013:TSD

[997] Rui Li, Shengjie Wang, and Kevin Chen-Chuan Chang. Towards social data platform: automatic topic-focused monitor for Twitter stream. *Proceedings of the VLDB Endowment*, 6(14): 1966–1977, September 2013. CODEN ???? ISSN 2150-8097.

Jin:2013:SFS

[998] Ruoming Jin and Guan Wang. Simple, fast, and scalable reachability oracle. *Proceedings of the VLDB Endowment*, 6(14):1978–1989, September 2013. CODEN ???? ISSN 2150-8097.

Bakibayev:2013:AOF

[999] Nurzhan Bakibayev, Tomás Kociský, Dan Olteanu, and Jakub Závodný. Aggregation and ordering in factorised databases. *Proceedings of the VLDB Endowment*, 6(14):1990–2001, September 2013. CODEN ???? ISSN 2150-8097.

Park:2013:PCS

[1000] Yoonjae Park, Jun-Ki Min, and Kyuseok Shim. Parallel computation of skyline and reverse skyline queries using MapReduce. *Proceedings of the VLDB Endowment*, 6(14):2002–2013, September 2013. CODEN ???? ISSN 2150-8097.

Xie:2013:FIG

[1001] Wenlei Xie, Guozhang Wang, David Bindel, Alan Demers, and Johannes Gehrke. Fast iterative graph computation with block updates. *Proceedings of the VLDB Endowment*, 6(14):2014–2025, September 2013. CODEN ???? ISSN 2150-8097.

Wang:2013:EEK

[1002] Xiaoli Wang, Xiaofeng Ding, Anthony K. H. Tung, and Zhenjie Zhang. Efficient and effective KNN sequence search with approximate n-grams. *Proceedings of the VLDB Endowment*, 7 (1):1–12, September 2013. CODEN ???? ISSN 2150-8097.

Yu:2013:MSE

[1003] Weiren Yu, Xuemin Lin, Wenjie Zhang, Lijun Chang, and Jian Pei. More is simpler: effectively and efficiently assessing node-pair similarities based on hyperlinks. *Proceedings of the VLDB Endowment*, 7(1):13–24, September 2013. CODEN ???? ISSN 2150-8097.

Gyssens:2013:ATS

[1004] Marc Gyssens, Jan Paredaens, Dirk Van Gucht, Jef Wijsen, and Yuqing Wu. An approach towards the study of symmetric queries. *Proceedings of the VLDB Endowment*, 7(1):25–36, September 2013. CODEN ???? ISSN 2150-8097.

Das:2013:CST

[1005] Sudipto Das, Vivek R. Narasayya, Feng Li, and Manoj Syamala. CPU sharing techniques for performance isolation in multi-tenant relational database-as-a-service. *Proceedings of the VLDB Endowment*, 7(1):37–48, September 2013. CODEN ???? ISSN 2150-8097.

Chen:2013:ATK

[1006] Qian Chen, Haibo Hu, and Jianliang Xu. Authenticating top-k queries in location-based services with confidentiality. *Proceedings of the VLDB Endowment*, 7(1):49–60, September 2013. CODEN ???? ISSN 2150-8097.

Qi:2013:TDO

[1007] Zichao Qi, Yanghua Xiao, Bin Shao, and Haixun Wang. Toward a distance oracle for billion-node graphs. *Proceedings of the VLDB Endowment*, 7(1): 61–72, September 2013. CODEN ???? ISSN 2150-8097.

Kaul:2013:FSP

[1008] Manohar Kaul, Raymond Chi-Wing Wong, Bin Yang, and Christian S. Jensen. Finding shortest paths on terrains by killing two birds with one stone. *Proceedings of the VLDB Endowment*, 7(1):73–84, September 2013. CODEN ???? ISSN 2150-8097.

Balkesen:2013:MCM

[1009] Cagri Balkesen, Gustavo Alonso, Jens Teubner, and M. Tamer Özsu. Multi-core, main-memory joins: sort vs. hash revisited. *Proceedings of the VLDB Endowment*, 7(1):85–96, September 2013. CODEN ???? ISSN 2150-8097.

Schuhknecht:2013:UPD

[1010] Felix Martin Schuhknecht, Alekh Jindal, and Jens Dittrich. The uncracked pieces in database cracking. *Proceedings of the VLDB Endowment*, 7(2):97–108, October 2013. CODEN ???? ISSN 2150-8097.

Eravci:2013:DBR

[1011] Bahaeddin Eravci and Hakan Ferhatosmanoglu. Diversity based relevance feedback for time series search. *Proceedings of the VLDB Endowment*, 7 (2):109–120, October 2013. CODEN ???? ISSN 2150-8097.

Pelley:2013:SMN

[1012] Steven Pelley, Thomas F. Wenisch, Brian T. Gold, and Bill Bridge. Storage management in the NVRAM era. *Proceedings of the VLDB Endowment*, 7(2):121–132, October 2013. CODEN ???? ISSN 2150-8097.

Salloum:2013:OOO

[1013] Mariam Salloum, Xin Luna Dong, Divesh Srivastava, and Vassilis J. Tsotras. Online ordering of overlapping data sources. *Proceedings of the VLDB Endowment*, 7(3):133–144, November 2013. CODEN ???? ISSN 2150-8097.

Wang:2013:MQO

[1014] Guoping Wang and Chee-Yong Chan. Multi-query optimization in MapReduce framework. *Proceedings of the VLDB Endowment*, 7(3):145–156, November 2013. CODEN ???? ISSN 2150-8097.

Li:2013:AAD

[1015] Zhenhui Li, Bolin Ding, Fei Wu, Tobias Kin Hou Lei, Roland Kays, and Margaret C. Crofoot. Attraction and avoidance detection from movements. *Proceedings of the VLDB Endowment*, 7(3):157–168, November 2013. CODEN ???? ISSN 2150-8097.

Zhao:2013:PBA

[1016] Xiang Zhao, Chuan Xiao, Xuemin Lin, Qing Liu, and Wenjie Zhang. A partition-based approach to structure similarity search. *Proceedings of the VLDB Endowment*, 7(3):169–180, November 2013. CODEN ???? ISSN 2150-8097.

Bailis:2013:HAT

[1017] Peter Bailis, Aaron Davidson, Alan Fekete, Ali Ghodsi, Joseph M. Hellerstein, and Ion Stoica. Highly available transactions: virtues and limitations. *Proceedings of the VLDB Endowment*, 7(3):181–192, November 2013. CODEN ???? ISSN 2150-8097.

Tian:2013:TLV

[1018] Yuanyuan Tian, Andrey Balmin, Severin Andreas Corsten, Shirish Tatikonda, and John McPherson. From "think like a vertex" to "think like a graph". *Proceedings of the VLDB Endowment*, 7(3):193–204, November 2013. CODEN ???? ISSN 2150-8097.

Niedermayer:2013:PNN

[1019] Johannes Niedermayer, Andreas Züfle, Tobias Emrich, Matthias Renz, Nikos Mamoulis, Lei Chen, and Hans-Peter Kriegel. Probabilistic nearest neighbor queries on uncertain moving object trajectories. *Proceedings of the VLDB Endowment*, 7(3):205–216, November 2013. CODEN ???? ISSN 2150-8097.

Karanasos:2013:DSD

[1020] Konstantinos Karanasos, Asterios Katsifodimos, and Ioana Manolescu. Delta: scalable data dissemination under capacity constraints. *Proceedings of the VLDB Endowment*, 7(4):217–228, December 2013. CODEN ???? ISSN 2150-8097.

Budak:2013:GOD

[1021] Ceren Budak, Theodore Georgiou, Divyakant Agrawal, and Amr El Abbadi. GeoScope: online detection of geo-correlated information trends in social networks. *Proceedings of the VLDB Endowment*, 7(4):229–240, December 2013. CODEN ???? ISSN 2150-8097.

Onizuka:2013:OIQ

[1022] Makoto Onizuka, Hiroyuki Kato, Soichiro Hidaka, Keisuke Nakano, and

Zhenjiang Hu. Optimization for iterative queries on MapReduce. *Proceedings of the VLDB Endowment*, 7(4): 241–252, December 2013. CODEN ???? ISSN 2150-8097.

Shuai:2013:WOS

[1023] Hong-Han Shuai, De-Nian Yang, Philip S. Yu, and Ming-Syan Chen. Willingness optimization for social group activity. *Proceedings of the VLDB Endowment*, 7(4):253–264, December 2013. CODEN ???? ISSN 2150-8097.

Cao:2013:HPS

[1024] Lei Cao and Elke A. Rundensteiner. High performance stream query processing with correlation-aware partitioning. *Proceedings of the VLDB Endowment*, 7(4):265–276, December 2013. CODEN ???? ISSN 2150-8097.

Difallah:2013:OBE

[1025] Djellel Eddine Difallah, Andrew Pavlo, Carlo Curino, and Philippe Cudre-Mauroux. OLTP-Bench: an extensible testbed for benchmarking relational databases. *Proceedings of the VLDB Endowment*, 7(4):277–288, December 2013. CODEN ???? ISSN 2150-8097.

Nandi:2013:GQS

[1026] Arnab Nandi, Lilong Jiang, and Michael Mandel. Gestural query specification. *Proceedings of the VLDB Endowment*, 7(4):289–300, December 2013. CODEN ???? ISSN 2150-8097.

Heise:2013:SDU

[1027] Arvid Heise, Jorge-Arnulfo Quiané-Ruiz, Ziawasch Abedjan, Anja Jentzsch, and Felix Naumann. Scalable discovery of unique column combinations. *Proceedings of the VLDB Endowment*, 7 (4):301–312, December 2013. CODEN ???? ISSN 2150-8097.

Tang:2013:EMD

[1028] Yu Tang, Leong Hou U., Yilun Cai, Nikos Mamoulis, and Reynold Cheng. Earth Mover's Distance based similarity search at scale. *Proceedings of the VLDB Endowment*, 7(4):313–324, December 2013. CODEN ???? ISSN 2150-8097.

Parameswaran:2013:SVD

[1029] Aditya Parameswaran, Neoklis Polyzotis, and Hector Garcia-Molina. SeeDB: visualizing database queries efficiently. *Proceedings of the VLDB Endowment*, 7(4):325–328, December 2013. CODEN ???? ISSN 2150-8097.

Mahmoud:2014:MES

[1030] Hatem A. Mahmoud, Vaibhav Arora, Faisal Nawab, Divyakant Agrawal, and Amr El Abbadi. MaaT: effective and scalable coordination of distributed transactions in the cloud. *Proceedings of the VLDB Endowment*, 7(5):329–340, January 2014. CODEN ???? ISSN 2150-8097.

Li:2014:DWA

[1031] Chao Li, Michael Hay, Gerome Miklau, and Yue Wang. A data- and workload-aware algorithm for range queries under differential privacy. *Proceedings of the VLDB Endowment*, 7(5):341–352, January 2014. CODEN ???? ISSN 2150-8097.

Greco:2014:CQA

[1032] Sergio Greco, Fabian Pijcke, and Jef Wijsen. Certain query answering in partially consistent databases. *Proceedings of the VLDB Endowment*, 7(5): 353–364, January 2014. CODEN ???? ISSN 2150-8097.

Mottin:2014:EQG

[1033] Davide Mottin, Matteo Lissandrini, Yannis Velegrakis, and Themis Palpanas. Exemplar queries: give me an example of what you need. *Proceedings of the VLDB Endowment*, 7(5): 365–376, January 2014. CODEN ???? ISSN 2150-8097.

Korula:2014:ERA

[1034] Nitish Korula and Silvio Lattanzi. An efficient reconciliation algorithm for social networks. *Proceedings of the VLDB Endowment*, 7(5):377–388, January 2014. CODEN ???? ISSN 2150-8097.

Chester:2014:CKR

[1035] Sean Chester, Alex Thomo, S. Venkatesh, and Sue Whitesides. Computing k-regret minimizing sets. *Proceedings of the VLDB Endowment*, 7(5):389–400, January 2014. CODEN ???? ISSN 2150-8097.

Yu:2014:RTK

[1036] Adams Wei Yu, Nikos Mamoulis, and Hao Su. Reverse top-k search using random walk with restart. *Proceedings of the VLDB Endowment*, 7(5): 401–412, January 2014. CODEN ???? ISSN 2150-8097.

Viglas:2014:WLS

[1037] Stratis D. Viglas. Write-limited sorts and joins for persistent memory. *Proceedings of the VLDB Endowment*, 7 (5):413–424, January 2014. CODEN ???? ISSN 2150-8097.

Anciaux:2014:FOD

[1038] N. Anciaux, L. Bouganim, T. Delot, S. Ilarri, L. Kloul, N. Mitton, and P. Pucheral. Folk-IS: opportunistic data services in least developed countries. *Proceedings of the VLDB Endowment*, 7(5):425–428, January 2014. CODEN ???? ISSN 2150-8097.

Giannikis:2014:SWO

[1039] Georgios Giannikis, Darko Makreshanski, Gustavo Alonso, and Donald Kossmann. Shared workload optimization. *Proceedings of the VLDB Endowment*, 7(6):429–440, February 2014. CODEN ???? ISSN 2150-8097.

Elseidy:2014:SAO

[1040] Mohammed Elseidy, Abdallah Elguindy, Aleksandar Vitorovic, and Christoph Koch. Scalable and adaptive online joins. *Proceedings of the VLDB Endowment*, 7(6):441–452, February 2014. CODEN ???? ISSN 2150-8097.

Morton:2014:SDE

[1041] Kristi Morton, Magdalena Balazinska, Dan Grossman, and Jock Mackinlay. Support the data enthusiast: challenges for next-generation data-analysis systems. *Proceedings of the VLDB Endowment*, 7(6):453–456, February 2014. CODEN ???? ISSN 2150-8097.

Deutch:2014:PFD

[1042] Daniel Deutch, Yuval Moskovitch, and Val Tannen. A provenance framework for data-dependent process analysis. *Proceedings of the VLDB Endowment*, 7(6):457–468, February 2014. CODEN ???? ISSN 2150-8097.

Chiang:2014:TED

[1043] Yueh-Hsuan Chiang, AnHai Doan, and Jeffrey F. Naughton. Tracking entities in the dynamic world: a fast algorithm for matching temporal records. *Proceedings of the VLDB Endowment*, 7 (6):469–480, February 2014. CODEN ???? ISSN 2150-8097.

Conway:2014:EAS

[1044] Neil Conway, Peter Alvaro, Emily Andrews, and Joseph M. Hellerstein. Edelweiss: automatic storage reclamation for distributed programming. *Proceedings of the VLDB Endowment*, 7 (6):481–492, February 2014. CODEN ???? ISSN 2150-8097.

Ntarmos:2014:RJQ

[1045] Nikos Ntarmos, Ioannis Patlakas, and Peter Triantafillou. Rank join queries in NoSQL databases. *Proceedings of the VLDB Endowment*, 7(7):493–504, March 2014. CODEN ???? ISSN 2150-8097.

Gupta:2014:BOS

[1046] Rahul Gupta, Alon Halevy, Xuezhi Wang, Steven Euijong Whang, and Fei Wu. Biperpedia: an ontology for search applications. *Proceedings of the VLDB Endowment*, 7(7):505–516, March 2014. CODEN ???? ISSN 2150-8097.

Elseidy:2014:GFS

[1047] Mohammed Elseidy, Ehab Abdelhamid, Spiros Skiadopoulos, and Panos Kalnis. GraMi: frequent subgraph and pattern mining in a single large graph. *Proceedings of the VLDB Endowment*, 7(7):517–528, March 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:LIO

[1048] Sheng Wang, David Maier, and Beng Chin Ooi. Lightweight indexing of observational data in log-structured storage. *Proceedings of the VLDB Endowment*, 7(7):529–540, March 2014. CODEN ???? ISSN 2150-8097.

Jiang:2014:EES

[1049] Dawei Jiang, Gang Chen, Beng Chin Ooi, Kian-Lee Tan, and Sai Wu. epiC: an extensible and scalable system for processing big data. *Proceedings of the VLDB Endowment*, 7(7):541–552, March 2014. CODEN ???? ISSN 2150-8097.

Boehm:2014:HPS

[1050] Matthias Boehm, Shirish Tatikonda, Berthold Reinwald, Prithviraj Sen, Yuanyuan Tian, Douglas R. Burdick, and Shivakumar Vaithyanathan. Hybrid parallelization strategies for large-scale machine learning in SystemML. *Proceedings of the VLDB Endowment*, 7(7):553–564, March 2014. CODEN ???? ISSN 2150-8097.

Yang:2014:SSG

[1051] Shengqi Yang, Yinghui Wu, Huan Sun, and Xifeng Yan. Schemaless and structureless graph querying. *Proceedings of the VLDB Endowment*, 7(7):565–576, March 2014. CODEN ???? ISSN 2150-8097.

Salihoglu:2014:OGA

[1052] Semih Salihoglu and Jennifer Widom. Optimizing graph algorithms on Pregel-like systems. *Proceedings of the VLDB Endowment*, 7(7):577–588, March 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:TCF

[1053] You Wu, Pankaj K. Agarwal, Chengkai Li, Jun Yang, and Cong Yu. Toward computational fact-checking. *Proceedings of the VLDB Endowment*, 7(7): 589–600, March 2014. CODEN ???? ISSN 2150-8097.

Arenas:2014:PAB

[1054] Marcelo Arenas, Gonzalo Díaz, Achille Fokoue, Anastasios Kementsietsidis, and Kavitha Srinivas. A principled approach to bridging the gap between graph data and their schemas. *Proceedings of the VLDB Endowment*, 7 (8):601–612, April 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:EPS

[1055] Dongxiang Zhang, Chee-Yong Chan, and Kian-Lee Tan. An efficient publish/subscribe index for e-commerce databases. *Proceedings of the VLDB Endowment*, 7(8):613–624, April 2014. CODEN ???? ISSN 2150-8097.

Jiang:2014:SSJ

[1056] Yu Jiang, Guoliang Li, Jianhua Feng, and Wen-Syan Li. String similarity joins: an experimental evaluation. *Proceedings of the VLDB Endowment*, 7 (8):625–636, April 2014. CODEN ???? ISSN 2150-8097.

Proserpio:2014:CDS

[1057] Davide Proserpio, Sharon Goldberg, and Frank McSherry. Calibrating data to sensitivity in private data analysis: a platform for differentially-private analysis of weighted datasets. *Proceedings of the VLDB Endowment*, 7(8):637–648, April 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:EMM

[1058] Wei Wang, Beng Chin Ooi, Xiaoyan Yang, Dongxiang Zhang, and Yueting Zhuang. Effective multi-modal retrieval based on stacked auto-encoders. *Proceedings of the VLDB Endowment*, 7 (8):649–660, April 2014. CODEN ???? ISSN 2150-8097.

Song:2014:PNF

[1059] Renchu Song, Weiwei Sun, Baihua Zheng, and Yu Zheng. PRESS: a novel framework of trajectory compression in road networks. *Proceedings of the VLDB Endowment*, 7(9):661–672, May 2014. CODEN ???? ISSN 2150-8097.

Yang:2014:FCO

[1060] Yajun Yang, Hong Gao, Jeffrey Xu Yu, and Jianzhong Li. Finding the cost-optimal path with time constraint over time-dependent graphs. *Proceedings of the VLDB Endowment*, 7(9):673–684, May 2014. CODEN ???? ISSN 2150-8097.

Parameswaran:2014:OCP

[1061] Aditya Parameswaran, Stephen Boyd, Hector Garcia-Molina, Ashish Gupta, Neoklis Polyzotis, and Jennifer Widom. Optimal crowd-powered rating and filtering algorithms. *Proceedings of the VLDB Endowment*, 7(9):685–696, May 2014. CODEN ???? ISSN 2150-8097.

Gruenheid:2014:IRL

[1062] Anja Gruenheid, Xin Luna Dong, and Divesh Srivastava. Incremental record linkage. *Proceedings of the VLDB Endowment*, 7(9):697–708, May 2014. CODEN ???? ISSN 2150-8097.

Roy:2014:LLH

[1063] Pratanu Roy, Jens Teubner, and Rainer Gemulla. Low-latency handshake join. *Proceedings of the VLDB Endowment*, 7(9):709–720, May 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:PPT

[1064] Huanhuan Wu, James Cheng, Silu Huang, Yiping Ke, Yi Lu, and Yanyan Xu. Path problems in temporal graphs. *Proceedings of the VLDB Endowment*, 7(9):721–732, May 2014. CODEN ???? ISSN 2150-8097.

Cao:2014:RRI

[1065] Xin Cao, Gao Cong, Christian S. Jensen, and Man Lung Yiu. Retrieving regions of interest for user exploration. *Proceedings of the VLDB Endowment*, 7(9):733–744, May 2014. CODEN ???? ISSN 2150-8097.

Liu:2014:SLE

[1066] Yingfan Liu, Jiangtao Cui, Zi Huang, Hui Li, and Heng Tao Shen. SK–LSH: an efficient index structure for approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 7(9):745–756, May 2014. CODEN ???? ISSN 2150-8097.

Lin:2014:AFP

[1067] Bing-Rong Lin and Daniel Kifer. On arbitrage-free pricing for general data queries. *Proceedings of the VLDB Endowment*, 7(9):757–768, May 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:SMF

[1068] Chao Zhang, Jiawei Han, Lidan Shou, Jiajun Lu, and Thomas La Porta. Splitter: mining fine-grained sequential patterns in semantic trajectories. *Proceedings of the VLDB Endowment*, 7(9):769–780, May 2014. CODEN ???? ISSN 2150-8097.

Floratou:2014:TBW

[1069] Avrilia Floratou, Frank Bertsch, Jignesh M. Patel, and Georgios Laskaris. Towards building wind tunnels for data center design. *Proceedings of the VLDB Endowment*, 7(9):781–784, May 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:RRQ

[1070] Zhao Zhang, Cheqing Jin, and Qiangqiang Kang. Reverse k-ranks query. *Proceedings of the VLDB Endowment*, 7(10):785–796, June 2014. CODEN ???? ISSN 2150-8097.

Jugel:2014:MVO

[1071] Uwe Jugel, Zbigniew Jerzak, Gregor Hackenbroich, Gregor Hackenbroich, and Volker Markl. M4: a visualization-oriented time series data aggregation. *Proceedings of the VLDB Endowment*, 7(10):797–808, June 2014. CODEN ???? ISSN 2150-8097.

Ghashami:2014:CMA

[1072] Mina Ghashami, Jeff M. Phillips, and Feifei Li. Continuous matrix approximation on distributed data. *Proceedings of the VLDB Endowment*, 7(10):809–820, June 2014. CODEN ???? ISSN 2150-8097.

Ren:2014:EAD

[1073] Kun Ren, Alexander Thomson, and Daniel J. Abadi. An evaluation of the advantages and disadvantages of deterministic database systems. *Proceedings of the VLDB Endowment*, 7(10):821–832, June 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:EMD

[1074] Hao Zhang, Bogdan Marius Tudor, Gang Chen, and Beng Chin Ooi. Efficient in-memory data management: an analysis. *Proceedings of the VLDB Endowment*, 7(10):833–836, June 2014. CODEN ???? ISSN 2150-8097.

Aluc:2014:WMW

[1075] Günes Aluç, M. Tamer Özsu, and Khuzaima Daudjee. Workload matters: why RDF databases need a new design. *Proceedings of the VLDB Endowment*, 7(10):837–840, June 2014. CODEN ???? ISSN 2150-8097.

Alsubaiee:2014:SMA

[1076] Sattam Alsubaiee, Alexander Behm, Vinayak Borkar, Zachary Heilbron, Young-Seok Kim, Michael J. Carey, Markus Dreseler, and Chen Li. Storage management in AsterixDB. *Proceedings of the VLDB Endowment*, 7 (10):841–852, June 2014. CODEN ???? ISSN 2150-8097.

Klonatos:2014:BEQ

[1077] Yannis Klonatos, Christoph Koch, Tiark Rompf, and Hassan Chafi. Building efficient query engines in a high-level language. *Proceedings of the VLDB Endowment*, 7(10):853–864, June 2014. CODEN ???? ISSN 2150-8097. See errata [1199].

Wang:2014:SLT

[1078] Tianzheng Wang and Ryan Johnson. Scalable logging through emerging non-volatile memory. *Proceedings of the VLDB Endowment*, 7(10):865–876, June 2014. CODEN ???? ISSN 2150-8097.

He:2014:WDM

[1079] Bingsheng He. When data management systems meet approximate hardware: challenges and opportunities. *Proceedings of the VLDB Endowment*, 7(10):877–880, June 2014. CODEN ???? ISSN 2150-8097.

Dong:2014:DFK

[1080] Xin Luna Dong, Evgeniy Gabrilovich, Geremy Heitz, Wilko Horn, Kevin Murphy, Shaohua Sun, and Wei Zhang. From data fusion to knowledge fusion. *Proceedings of the VLDB Endowment*, 7(10):881–892, June 2014. CODEN ???? ISSN 2150-8097.

Funke:2014:KPC

[1081] Stefan Funke, André Nusser, and Sabine Storandt. On k-path covers and their applications. *Proceedings of the VLDB Endowment*, 7(10):893–902, June 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:CDV

[1082] Eugene Wu, Leilani Battle, and Samuel R. Madden. The case for data visualization management systems: vision paper. *Proceedings of the VLDB Endowment*, 7(10):903–906, June 2014. CODEN ???? ISSN 2150-8097.

Li:2014:WAA

[1083] Yinan Li and Jignesh M. Patel. WideTable: an accelerator for analytical data processing. *Proceedings of the VLDB Endowment*, 7(10):907–918, June 2014. CODEN ???? ISSN 2150-8097.

To:2014:FPW

[1084] Hien To, Gabriel Ghinita, and Cyrus Shahabi. A framework for protecting worker location privacy in spatial crowdsourcing. *Proceedings of the VLDB Endowment*, 7(10):919–930, June 2014. CODEN ???? ISSN 2150-8097.

Eldawy:2014:TTS

[1085] Ahmed Eldawy, Justin Levandoski, and Per-Åke Larson. Trekking through Siberia: managing cold data in a memory-optimized database. *Proceedings of the VLDB Endowment*, 7(11):931–942, July 2014. CODEN ???? ISSN 2150-8097.

Duggan:2014:CPD

[1086] Jennie Duggan. The case for personal data-driven decision making. *Proceedings of the VLDB Endowment*, 7(11):943–946, July 2014. CODEN ???? ISSN 2150-8097.

Chairunnanda:2014:CMM

[1087] Prima Chairunnanda, Khuzaima Daudjee, and M. Tamer Özsu. ConfluxDB: multi-master replication for partitioned snapshot isolation databases. *Proceedings of the VLDB Endowment*, 7(11):947–958, July 2014. CODEN ???? ISSN 2150-8097.

Goncalves:2014:DMS

[1088] Bernardo Gonçalves and Fabio Porto. γ-DB: managing scientific hypotheses as uncertain data. *Proceedings of the VLDB Endowment*, 7(11):959–962, July 2014. CODEN ???? ISSN 2150-8097.

Woods:2014:IIS

[1089] Louis Woods, Zsolt István, and Gustavo Alonso. Ibex: an intelligent storage engine with support for advanced SQL offloading. *Proceedings of the VLDB Endowment*, 7(11):963–974, July 2014. CODEN ???? ISSN 2150-8097.

Yun:2014:NNL

[1090] Hyokun Yun, Hsiang-Fu Yu, Cho-Jui Hsieh, S. V. N. Vishwanathan, and Inderjit Dhillon. NOMAD: non-locking, stochastic multi-machine algorithm for asynchronous and decentralized matrix completion. *Proceedings of the VLDB Endowment*, 7(11):975–986, July 2014. CODEN ???? ISSN 2150-8097.

Song:2014:RVL

[1091] Shaoxu Song, Hong Cheng, Jeffrey Xu Yu, and Lei Chen. Repairing vertex labels under neighborhood constraints. *Proceedings of the VLDB Endowment*, 7(11):987–998, July 2014. CODEN ???? ISSN 2150-8097.

Altowim:2014:PAR

[1092] Yasser Altowim, Dmitri V. Kalashnikov, and Sharad Mehrotra. Progressive approach to relational entity resolution. *Proceedings of the VLDB Endowment*, 7(11):999–1010, July 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:CAQ

[1093] Kaibo Wang, Kai Zhang, Yuan Yuan, Siyuan Ma, Rubao Lee, Xiaoning Ding, and Xiaodong Zhang. Concurrent analytical query processing with GPUs. *Proceedings of the VLDB Endowment*, 7(11):1011–1022, July 2014. CODEN ???? ISSN 2150-8097.

Maehara:2014:CPP

[1094] Takanori Maehara, Takuya Akiba, Yoichi Iwata, and Ken ichi Kawarabayashi. Computing personalized PageRank quickly by exploiting graph structures. *Proceedings of the VLDB Endowment*, 7(12):1023–1034, August 2014. CODEN ???? ISSN 2150-8097.

Serafini:2014:AES

[1095] Marco Serafini, Essam Mansour, Ashraf Aboulnaga, Kenneth Salem, Taha Rafiq, and Umar Farooq Minhas. Accordion: elastic scalability for database systems supporting distributed transactions. *Proceedings of the VLDB Endowment*, 7(12):1035–1046, August 2014. CODEN ???? ISSN 2150-8097.

Han:2014:ECP

[1096] Minyang Han, Khuzaima Daudjee, Khaled Ammar, M. Tamer Özsu, Xingfang Wang, and Tianqi Jin. An experimental comparison of pregel-like graph processing systems. *Proceedings of the VLDB Endowment*, 7(12):1047–1058, August 2014. CODEN ???? ISSN 2150-8097.

Sarma:2014:CSJ

[1097] Akash Das Sarma, Yeye He, and Surajit Chaudhuri. ClusterJoin: a similarity joins framework using map-reduce. *Proceedings of the VLDB Endowment*, 7(12):1059–1070, August 2014. CODEN ???? ISSN 2150-8097.

Vesdapunt:2014:CAE

[1098] Norases Vesdapunt, Kedar Bellare, and Nilesh Dalvi. Crowdsourcing algorithms for entity resolution. *Proceedings of the VLDB Endowment*, 7(12): 1071–1082, August 2014. CODEN ???? ISSN 2150-8097.

Fan:2014:DGS

[1099] Wenfei Fan, Xin Wang, Yinghui Wu, and Dong Deng. Distributed graph simulation: impossibility and possibility. *Proceedings of the VLDB Endowment*, 7(12):1083–1094, August 2014. CODEN ???? ISSN 2150-8097.

Nagel:2014:CGE

[1100] Fabian Nagel, Gavin Bierman, and Stratis D. Viglas. Code generation for efficient query processing in managed runtimes. *Proceedings of the VLDB Endowment*, 7(12):1095–1106, August 2014. CODEN ???? ISSN 2150-8097.

Liu:2014:AED

[1101] Weimo Liu, Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Aggregate estimation over dynamic hidden web databases. *Proceedings of the VLDB Endowment*, 7(12): 1107–1118, August 2014. CODEN ???? ISSN 2150-8097.

Karpathiotakis:2014:AQP

[1102] Manos Karpathiotakis, Miguel Branco, Ioannis Alagiannis, and Anastasia Ailamaki. Adaptive query processing on RAW data. *Proceedings of the VLDB Endowment*, 7(12):1119–1130, August 2014. CODEN ???? ISSN 2150-8097.

Afrati:2014:SQT

[1103] Foto N. Afrati, Dan Delorey, Mosha Pasumansky, and Jeffrey D. Ullman. Storing and querying tree-structured records in Dremel. *Proceedings of the VLDB Endowment*, 7(12):1131–1142, August 2014. CODEN ???? ISSN 2150-8097.

Starlinger:2014:SSS

[1104] Johannes Starlinger, Bryan Brancotte, Sarah Cohen-Boulakia, and Ulf Leser. Similarity search for scientific workflows. *Proceedings of the VLDB Endow-*

ment, 7(12):1143–1154, August 2014. CODEN ???? ISSN 2150-8097.

Kellaris:2014:DPE

[1105] Georgios Kellaris, Stavros Papadopoulos, Xiaokui Xiao, and Dimitris Papadias. Differentially private event sequences over infinite streams. *Proceedings of the VLDB Endowment*, 7(12): 1155–1166, August 2014. CODEN ???? ISSN 2150-8097.

Londhe:2014:MTC

[1106] Nikhil Londhe, Vishrawas Gopalakrishnan, Aidong Zhang, Hung Q. Ngo, and Rohini Srihari. Matching titles with cross title web-search enrichment and community detection. *Proceedings of the VLDB Endowment*, 7(12):1167–1178, August 2014. CODEN ???? ISSN 2150-8097.

Song:2014:CSR

[1107] Shaoxu Song, Lei Chen, and Hong Cheng. On concise set of relative candidate keys. *Proceedings of the VLDB Endowment*, 7(12):1179–1190, August 2014. CODEN ???? ISSN 2150-8097.

Wei:2014:RQI

[1108] Hao Wei, Jeffrey Xu Yu, Can Lu, and Ruoming Jin. Reachability querying: an independent permutation labeling approach. *Proceedings of the VLDB Endowment*, 7(12):1191–1202, August 2014. CODEN ???? ISSN 2150-8097.

Jiang:2014:HDL

[1109] Minhao Jiang, Ada Wai-Chee Fu, Raymond Chi-Wing Wong, and Yanyan Xu. Hop doubling label indexing for point-to-point distance querying on scale-free networks. *Proceedings of the VLDB Endowment*, 7(12):1203–1214, August 2014. CODEN ???? ISSN 2150-8097.

Suchanek:2014:SC

[1110] Fabian M. Suchanek and Nicoleta Preda. Semantic culturomics. *Proceedings of the VLDB Endowment*, 7(12): 1215–1218, August 2014. CODEN ???? ISSN 2150-8097.

Kuhlenkamp:2014:BSE

[1111] Jörn Kuhlenkamp, Markus Klems, and Oliver Röss. Benchmarking scalability and elasticity of distributed database systems. *Proceedings of the VLDB Endowment*, 7(12):1219–1230, August 2014. CODEN ???? ISSN 2150-8097.

Cao:2014:BCQ

[1112] Yang Cao, Wenfei Fan, Tianyu Wo, and Wenyuan Yu. Bounded conjunctive queries. *Proceedings of the VLDB Endowment*, 7(12):1231–1242, August 2014. CODEN ???? ISSN 2150-8097.

Shanbhag:2014:OJE

[1113] Anil Shanbhag and S. Sudarshan. Optimizing join enumeration in transformation-based query optimizers. *Proceedings of the VLDB Endowment*, 7(12):1243–1254, August 2014. CODEN ???? ISSN 2150-8097.

Jacob:2014:SMA

[1114] Marie Jacob, Benny Kimelfeld, and Julia Stoyanovich. A system for management and analysis of preference data. *Proceedings of the VLDB Endowment*, 7(12):1255–1258, August 2014. CODEN ???? ISSN 2150-8097.

Gupta:2014:MGR

[1115] Ashish Gupta, Fan Yang, Jason Govig, Adam Kirsch, Kelvin Chan, Kevin

Lai, Shuo Wu, Sandeep Govind Dhoot, Abhilash Rajesh Kumar, Ankur Agiwal, Sanjay Bhansali, Mingsheng Hong, Jamie Cameron, Masood Siddiqi, David Jones, Jeff Shute, Andrey Gubarev, Shivakumar Venkataraman, and Divyakant Agrawal. Mesa: geo-replicated, near real-time, scalable data warehousing. *Proceedings of the VLDB Endowment*, 7(12):1259–1270, August 2014. CODEN ???? ISSN 2150-8097.

Liagouris:2014:EES

[1116] John Liagouris, Nikos Mamoulis, Panagiotis Bouros, and Manolis Terrovitis. An effective encoding scheme for spatial RDF data. *Proceedings of the VLDB Endowment*, 7(12):1271–1282, August 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:DSM

[1117] Ce Zhang and Christopher Ré. DimmWitted: a study of main-memory statistical analytics. *Proceedings of the VLDB Endowment*, 7(12):1283–1294, August 2014. CODEN ???? ISSN 2150-8097.

Floratou:2014:SHF

[1118] Avrilia Floratou, Umar Farooq Minhas, and Fatma Özcan. SQL-on-Hadoop: full circle back to shared-nothing database architectures. *Proceedings of the VLDB Endowment*, 7 (12):1295–1306, August 2014. CODEN ???? ISSN 2150-8097.

Guarnieri:2014:OSA

[1119] Marco Guarnieri and David Basin. Optimal security-aware query processing. *Proceedings of the VLDB Endowment*, 7(12):1307–1318, August 2014. CODEN ???? ISSN 2150-8097.

Shi:2014:MTE

[1120] Juwei Shi, Jia Zou, Jiaheng Lu, Zhao Cao, Shiqiang Li, and Chen Wang. MRTuner: a toolkit to enable holistic optimization for MapReduce jobs. *Proceedings of the VLDB Endowment*, 7 (13):1319–1330, August 2014. CODEN ???? ISSN 2150-8097.

Sadoghi:2014:RDL

[1121] Mohammad Sadoghi, Mustafa Canim, Bishwaranjan Bhattacharjee, Fabian Nagel, and Kenneth A. Ross. Reducing database locking contention through multi-version concurrency. *Proceedings of the VLDB Endowment*, 7(13):1331–1342, August 2014. CODEN ???? ISSN 2150-8097.

Su:2014:CEM

[1122] Xueyuan Su, Garret Swart, Brian Goetz, Brian Oliver, and Paul Sandoz. Changing engines in midstream: a Java stream computational model for big data processing. *Proceedings of the VLDB Endowment*, 7(13):1343–1354, August 2014. CODEN ???? ISSN 2150-8097.

Lee:2014:JEP

[1123] Jae-Gil Lee, Gopi Attaluri, Ronald Barber, Naresh Chainani, Oliver Draese, Frederick Ho, Stratos Idreos, Min-Soo Kim, Sam Lightstone, Guy Lohman, Konstantinos Morfonios, Keshava Murthy, Ippokratis Pandis, Lin Qiao, Vijayshankar Raman, Vincent Kulandai Samy, Richard Sidle, Knut Stolze, and Liping Zhang. Joins on encoded and partitioned data. *Proceedings of the VLDB Endowment*, 7 (13):1355–1366, August 2014. CODEN ???? ISSN 2150-8097.

Poess:2014:TFI

[1124] Meikel Poess, Tilmann Rabl, Hans-Arno Jacobsen, and Brian Caufield. TPC–DI: the first industry benchmark for data integration. *Proceedings of the VLDB Endowment*, 7(13):1367–1378, August 2014. CODEN ???? ISSN 2150-8097.

Gupta:2014:RTT

[1125] Pankaj Gupta, Venu Satuluri, Ajeet Grewal, Siva Gurumurthy, Volodymyr Zhabiuk, Quannan Li, and Jimmy Lin. Real-time Twitter recommendation: online motif detection in large dynamic graphs. *Proceedings of the VLDB Endowment*, 7(13):1379–1380, August 2014. CODEN ???? ISSN 2150-8097.

Cha:2014:IDN

[1126] Sang K. Cha, Kunsoo Park, Changbin Song, Kihong Kim, Cheol Ryu, and Sunho Lee. Interval disaggregate: a new operator for business planning. *Proceedings of the VLDB Endowment*, 7(13):1381–1392, August 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:FFT

[1127] Zhuo Zhang, Chao Li, Yangyu Tao, Renyu Yang, Hong Tang, and Jie Xu. Fuxi: a fault-tolerant resource management and job scheduling system at Internet scale. *Proceedings of the VLDB Endowment*, 7(13):1393–1404, August 2014. CODEN ???? ISSN 2150-8097.

Simmen:2014:LSG

[1128] David Simmen, Karl Schnaitter, Jeff Davis, Yingjie He, Sangeet Lohariwala, Ajay Mysore, Vinayak Shenoi, Mingfeng Tan, and Yu Xiao. Large-scale graph analytics in Aster 6: bringing context to big data discovery. *Proceedings of the VLDB Endowment*, 7(13):1405–1416, August 2014. CODEN ???? ISSN 2150-8097.

Chen:2014:FFK

[1129] Zhimin Chen, Vivek Narasayya, and Surajit Chaudhuri. Fast foreign-key detection in Microsoft SQL server PowerPivot for Excel. *Proceedings of the VLDB Endowment*, 7(13):1417–1428, August 2014. CODEN ???? ISSN 2150-8097.

Yu:2014:BDS

[1130] Meng-Chieh Yu, Tong Yu, Shao-Chen Wang, Chih-Jen Lin, and Edward Y. Chang. Big data small footprint: the design of a low-power classifier for detecting transportation modes. *Proceedings of the VLDB Endowment*, 7(13): 1429–1440, August 2014. CODEN ???? ISSN 2150-8097.

Boykin:2014:SFI

[1131] Oscar Boykin, Sam Ritchie, Ian O'Connell, and Jimmy Lin. Summingbird: a framework for integrating batch and online MapReduce computations. *Proceedings of the VLDB Endowment*, 7(13):1441–1451, August 2014. CODEN ???? ISSN 2150-8097.

Ahmed:2014:SBT

[1132] Rafi Ahmed, Rajkumar Sen, Meikel Poess, and Sunil Chakkappen. Of snowstorms and bushy trees. *Proceedings of the VLDB Endowment*, 7(13): 1452–1461, August 2014. CODEN ???? ISSN 2150-8097.

Vemuri:2014:EPS

[1133] Srinivas Vemuri, Maneesh Varshney, Krishna Puttaswamy, and Rui Liu. Execution primitives for scalable joins and aggregations in MapReduce. *Proceedings of the VLDB Endowment*, 7(13): 1462–1473, August 2014. CODEN ???? ISSN 2150-8097.

Arauz:2014:CLT

[1134] Javier Arauz. CAP limits in telecom subscriber database design. *Proceedings of the VLDB Endowment*, 7(13): 1474–1483, August 2014. CODEN ???? ISSN 2150-8097.

Bruno:2014:AJS

[1135] Nicolas Bruno, YongChul Kwon, and Ming-Chuan Wu. Advanced join strategies for large-scale distributed computation. *Proceedings of the VLDB Endowment*, 7(13):1484–1495, August 2014. CODEN ???? ISSN 2150-8097.

Liu:2014:DSG

[1136] Yue Liu, Songlin Hu, Tilmann Rabl, Wantao Liu, Hans-Arno Jacobsen, Kaifeng Wu, Jian Chen, and Jintao Li. DGFIndex for smart grid: enhancing Hive with a cost-effective multidimensional range index. *Proceedings of the VLDB Endowment*, 7(13):1496–1507, August 2014. CODEN ???? ISSN 2150-8097.

Yan:2014:EBS

[1137] Ying Yan, Liang Jeff Chen, and Zheng Zhang. Error-bounded sampling for analytics on big sparse data. *Proceedings of the VLDB Endowment*, 7(13):1508–1519, August 2014. CODEN ???? ISSN 2150-8097.

Gankidi:2014:IHD

[1138] Vinitha Reddy Gankidi, Nikhil Teletia, Jignesh M. Patel, Alan Halverson, and David J. DeWitt. Indexing HDFS data in PDW: splitting the data from the index. *Proceedings of the VLDB Endowment*, 7(13):1520–1528, August 2014. CODEN ???? ISSN 2150-8097.

Sun:2014:CLS

[1139] Chong Sun, Narasimhan Rampalli, Frank Yang, and AnHai Doan. Chimera: large-scale classification using machine learning, rules, and crowdsourcing. *Proceedings of the VLDB Endowment*, 7(13):1529–1540, August 2014. CODEN ???? ISSN 2150-8097.

Bonifati:2014:IJQ

[1140] Angela Bonifati, Radu Ciucanu, and SŁAwek Staworko. Interactive join query inference with JIM. *Proceedings of the VLDB Endowment*, 7(13):1541–1544, August 2014. CODEN ???? ISSN 2150-8097.

Zheng:2014:MMS

[1141] Yuxin Zheng, Zhifeng Bao, Lidan Shou, and Anthony K. H. Tung. MESA: a map service to support fuzzy type-ahead search over geo-textual data. *Proceedings of the VLDB Endowment*, 7(13):1545–1548, August 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:RRT

[1142] Henan Wang, Guoliang Li, Huiqi Hu, Shuo Chen, Bingwen Shen, Hao Wu, Wen-Syan Li, and Kian-Lee Tan. R3: a real-time route recommendation system. *Proceedings of the VLDB Endowment*, 7(13):1549–1552, August 2014. CODEN ???? ISSN 2150-8097.

Benedikt:2014:PPD

[1143] Michael Benedikt, Julien Leblay, and Efthymia Tsamoura. PDQ: proof-driven query answering over Web-based data. *Proceedings of the VLDB Endowment*, 7(13):1553–1556, August 2014. CODEN ???? ISSN 2150-8097.

Hassan:2014:DFA

[1144] Naeemul Hassan, Afroza Sultana, You Wu, Gensheng Zhang, Chengkai Li, Jun Yang, and Cong Yu. Data in, fact out: automated monitoring of facts by FactWatcher. *Proceedings of the VLDB Endowment*, 7(13):1557–1560, August 2014. CODEN ???? ISSN 2150-8097.

Yuan:2014:ODA

[1145] Mingxuan Yuan, Ke Deng, Jia Zeng, Yanhua Li, Bing Ni, Xiuqiang He, Fei Wang, Wenyuan Dai, and Qiang Yang. OceanST: a distributed analytic system for large-scale spatiotemporal mobile broadband data. *Proceedings of the VLDB Endowment*, 7(13):1561–1564, August 2014. CODEN ???? ISSN 2150-8097.

Geerts:2014:TAF

[1146] Floris Geerts, Giansalvatore Mecca, Paolo Papotti, and Donatello Santoro. That's all folks!: Llunatic goes open source. *Proceedings of the VLDB Endowment*, 7(13):1565–1568, August 2014. CODEN ???? ISSN 2150-8097.

Liu:2014:HMA

[1147] Weimo Liu, Saad Bin Suhaim, Saravanan Thirumuruganathan, Nan Zhang, Gautam Das, and Ali Jaoua. HDBTracker: monitoring the aggregates on dynamic hidden web databases. *Proceedings of the VLDB Endowment*, 7(13):1569–1572, August 2014. CODEN ???? ISSN 2150-8097.

Xia:2014:BBA

[1148] Fan Xia, Ye Li, Chengcheng Yu, Haixin Ma, and Weining Qian. BSMA: a benchmark for analytical queries over social media data. *Proceedings of the VLDB Endowment*, 7(13):1573–1576, August 2014. CODEN ???? ISSN 2150-8097.

Petermann:2014:GBD

[1149] André Petermann, Martin Junghanns, Robert Müller, and Erhard Rahm. Graph-based data integration and business intelligence with BIIIG. *Proceedings of the VLDB Endowment*, 7(13):1577–1580, August 2014. CODEN ???? ISSN 2150-8097.

Vartak:2014:SAG

[1150] Manasi Vartak, Samuel Madden, Aditya Parameswaran, and Neoklis Polyzotis. SeeDB: automatically generating query visualizations. *Proceedings of the VLDB Endowment*, 7(13):1581–1584, August 2014. CODEN ???? ISSN 2150-8097.

Dutt:2014:QEA

[1151] Anshuman Dutt, Sumit Neelam, and Jayant R. Haritsa. QUEST: an exploratory approach to robust query processing. *Proceedings of the VLDB Endowment*, 7(13):1585–1588, August 2014. CODEN ???? ISSN 2150-8097.

Lei:2014:RIR

[1152] Chuan Lei, Zhongfang Zhuang, Elke A. Rundensteiner, and Mohamed Y. Eltabakh. Redoop infrastructure for recurring big data queries. *Proceedings* of the VLDB Endowment, 7(13):1589–1592, August 2014. CODEN ???? ISSN 2150-8097.

Brucato:2014:PTP

[1153] Matteo Brucato, Rahul Ramakrishna, Azza Abouzied, and Alexandra Meliou. PackageBuilder: from tuples to packages. *Proceedings of the VLDB Endowment*, 7(13):1593–1596, August 2014. CODEN ???? ISSN 2150-8097.

Amsterdamer:2014:OAC

[1154] Yael Amsterdamer, Susan B. Davidson, Tova Milo, Slava Novgorodov, and Amit Somech. Ontology assisted crowd mining. *Proceedings of the VLDB Endowment*, 7(13):1597–1600, August 2014. CODEN ???? ISSN 2150-8097.

Chen:2014:SSE

[1155] Lisi Chen, Yan Cui, Gao Cong, and Xin Cao. SOPS: a system for efficient processing of spatial-keyword publish/subscribe. *Proceedings of the VLDB Endowment*, 7(13):1601–1604, August 2014. CODEN ???? ISSN 2150-8097.

Shirakawa:2014:MLI

[1156] Masumi Shirakawa, Takahiro Hara, and Shojiro Nishio. MLJ: language-independent real-time search of tweets reported by media outlets and journalists. *Proceedings of the VLDB Endowment*, 7(13):1605–1608, August 2014. CODEN ???? ISSN 2150-8097.

Bress:2014:OHO

[1157] Sebastian Breß, Bastian Köcher, Max Heimel, Volker Markl, Michael Saecker, and Gunter Saake. Ocelot/HyPE: optimized data processing on heterogeneous hardware. *Proceedings of the VLDB Endowment*, 7(13):1609–1612, August 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:MMO

[1158] Fei Wu, Tobias Kin Hou Lei, Zhenhui Li, and Jiawei Han. MoveMine 2.0: mining object relationships from movement data. *Proceedings of the VLDB Endowment*, 7(13):1613–1616, August 2014. CODEN ???? ISSN 2150-8097.

Sun:2014:PFA

[1159] Liwen Sun, Sanjay Krishnan, Reynold S. Xin, and Michael J. Franklin. A partitioning framework for aggressive data skipping. *Proceedings of the VLDB Endowment*, 7(13):1617–1620, August 2014. CODEN ???? ISSN 2150-8097.

Cao:2014:IOE

[1160] Lei Cao, Qingyang Wang, and Elke A. Rundensteiner. Interactive outlier exploration in big data streams. *Proceedings of the VLDB Endowment*, 7(13):1621–1624, August 2014. CODEN ???? ISSN 2150-8097.

To:2014:SAE

[1161] Quoc-Cuong To, Benjamin Nguyen, and Philippe Pucheral. SQL/AA: executing SQL on an asymmetric architecture. *Proceedings of the VLDB Endowment*, 7(13):1625–1628, August 2014. CODEN ???? ISSN 2150-8097.

Chen:2014:GGS

[1162] Zhao Chen, Rui Fu, Ziyuan Zhao, Zheng Liu, Leihao Xia, Lei Chen, Peng Cheng, Caleb Chen Cao, Yongxin Tong, and Chen Jason Zhang. gMission: a general spatial crowdsourcing platform. *Proceedings of the VLDB Endowment*, 7(13):1629–1632, August 2014. CODEN ???? ISSN 2150-8097.

Cetintemel:2014:SSN

[1163] Ugur Cetintemel, Jiang Du, Tim Kraska, Samuel Madden, David Maier, John Meehan, Andrew Pavlo, Michael Stonebraker, Erik Sutherland, Nesime Tatbul, Kristin Tufte, Hao Wang, and Stanley Zdonik. S-Store: a streaming NewSQL system for big velocity applications. *Proceedings of the VLDB Endowment*, 7(13):1633–1636, August 2014. CODEN ???? ISSN 2150-8097.

Xie:2014:CRT

[1164] Runquan Xie, Feida Zhu, Hui Ma, Wei Xie, and Chen Lin. CLEar: a real-time online observatory for bursty and viral events. *Proceedings of the VLDB Endowment*, 7(13):1637–1640, August 2014. CODEN ???? ISSN 2150-8097.

Suh:2014:ALI

[1165] Young-Kyoon Suh, Richard T. Snodgrass, and Rui Zhang. AZDBLab: a laboratory information system for large-scale empirical DBMS studies. *Proceedings of the VLDB Endowment*, 7(13):1641–1644, August 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:TTM

[1166] Qi Wang, Manohar Kaul, Cheng Long, and Raymond Chi-Wing Wong. Terrain-Toolkit: a multi-functional tool for terrain data. *Proceedings of the VLDB Endowment*, 7(13):1645–1648, August 2014. CODEN ???? ISSN 2150-8097.

Fu:2014:FDC

[1167] Yupeng Fu, Kian Win Ong, Yannis Papakonstantinou, and Erick Zamora. Forward: data-centric ULS using declarative templates that efficiently wrap third-party JavaScript components. *Proceedings of the VLDB Endowment*, 7(13):1649–1652, August 2014. CODEN ???? ISSN 2150-8097.

Lin:2014:SSP

[1168] Xika Lin, Abhishek Mukherji, Elke A. Rundensteiner, and Matthew O. Ward. SPIRE: supporting parameter-driven interactive rule mining and exploration. *Proceedings of the VLDB Endowment*, 7(13):1653–1656, August 2014. CODEN ???? ISSN 2150-8097.

Anderson:2014:IDE

[1169] Michael R. Anderson, Michael Cafarella, Yixing Jiang, Guan Wang, and Bochun Zhang. An integrated development environment for faster feature engineering. *Proceedings of the VLDB Endowment*, 7(13):1657–1660, August 2014. CODEN ???? ISSN 2150-8097.

Xiong:2014:PSD

[1170] Pengcheng Xiong and Hakan Hacigümüs. Pronto: a software-defined networking based system for performance management of analytical queries on distributed data stores. *Proceedings of the VLDB Endowment*, 7(13):1661–1664, August 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:GYB

[1171] Rui Zhang, Reshu Jain, Prasenjit Sarkar, and Lukas Rupprecht. Getting your big data priorities straight: a demonstration of priority-based QoS using social-network-driven stock recommendation. *Proceedings of the VLDB Endowment*, 7(13):1665–1668, August 2014. CODEN ???? ISSN 2150-8097.

Jindal:2014:VYR

[1172] Alekh Jindal, Praynaa Rawlani, Eugene Wu, Samuel Madden, Amol Deshpande, and Mike Stonebraker. Vertexica: your relational friend for graph analytics! *Proceedings of the VLDB Endowment*, 7(13):1669–1672, August 2014. CODEN ???? ISSN 2150-8097.

Quamar:2014:NNC

[1173] Abdul Quamar, Amol Deshpande, and Jimmy Lin. NScale: neighborhood-centric analytics on large graphs. *Proceedings of the VLDB Endowment*, 7 (13):1673–1676, August 2014. CODEN ???? ISSN 2150-8097.

Li:2014:DDP

[1174] Haoran Li, Li Xiong, Lifan Zhang, and Xiaoqian Jiang. DPSynthesizer: differentially private data synthesizer for privacy preserving data sharing. *Proceedings of the VLDB Endowment*, 7(13): 1677–1680, August 2014. CODEN ???? ISSN 2150-8097.

Kong:2014:SLS

[1175] Longbo Kong, Zhi Liu, and Yan Huang. SPOT: locating social media users based on social network context. *Proceedings of the VLDB Endowment*, 7 (13):1681–1684, August 2014. CODEN ???? ISSN 2150-8097.

Alavi:2014:RQE

[1176] Zohreh Alavi, Lu Zhou, James Powers, and Keke Chen. RASP-QS: efficient and confidential query services in the cloud. *Proceedings of the VLDB Endowment*, 7(13):1685–1688, August 2014. CODEN ???? ISSN 2150-8097.

Kunjir:2014:TTM

[1177] Mayuresh Kunjir, Prajakta Kalmegh, and Shivnath Babu. Thoth: towards managing a multi-system cluster. *Proceedings of the VLDB Endowment*, 7 (13):1689–1692, August 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:XLC

[1178] Lei Zhang and Achim Rettinger. X-LiSA: cross-lingual semantic annotation. *Proceedings of the VLDB Endowment*, 7(13):1693–1696, August 2014. CODEN ???? ISSN 2150-8097.

Jayachandran:2014:CUI

[1179] Prasanth Jayachandran, Karthik Tunga, Niranjan Kamat, and Arnab Nandi. Combining user interaction, speculative query execution and sampling in the DICE system. *Proceedings of the VLDB Endowment*, 7(13):1697–1700, August 2014. CODEN ???? ISSN 2150-8097.

Su:2014:SSM

[1180] Han Su, Kai Zheng, Kai Zeng, Jiamin Huang, and Xiaofang Zhou. STMaker: a system to make sense of trajectory data. *Proceedings of the VLDB Endowment*, 7(13):1701–1704, August 2014. CODEN ???? ISSN 2150-8097.

Jugel:2014:FVA

[1181] Uwe Jugel, Zbigniew Jerzak, Gregor Hackenbroich, and Volker Markl. Faster visual analytics through pixel-perfect aggregation. *Proceedings of the VLDB Endowment*, 7(13):1705–1708, August 2014. CODEN ???? ISSN 2150-8097.

Khan:2014:SBG

[1182] Arijit Khan and Sameh Elnikety. Systems for big-graphs. *Proceedings of the VLDB Endowment*, 7(13):1709–1710, August 2014. CODEN ???? ISSN 2150-8097.

Gal:2014:UER

[1183] Avigdor Gal. Uncertain entity resolution: re-evaluating entity resolution in the big data era: tutorial. *Proceedings of the VLDB Endowment*, 7(13):1711–1712, August 2014. CODEN ???? ISSN 2150-8097.

Suchanek:2014:KBA

[1184] Fabian M. Suchanek and Gerhard Weikum. Knowledge bases in the age of big data analytics. *Proceedings of the VLDB Endowment*, 7(13):1713–1714, August 2014. CODEN ???? ISSN 2150-8097.

Meliou:2014:CED

[1185] Alexandra Meliou, Sudeepa Roy, and Dan Suciu. Causality and explanations in databases. *Proceedings of the VLDB Endowment*, 7(13):1715–1716, August 2014. CODEN ???? ISSN 2150-8097.

Li:2014:ESB

[1186] Yunyao Li, Ziyang Liu, and Huaiyu Zhu. Enterprise search in the big data era: recent developments and open challenges. *Proceedings of the VLDB Endowment*, 7(13):1717–1718, August 2014. CODEN ???? ISSN 2150-8097.

Li:2014:VPD

[1187] Yunyao Li and Erich Neuhold. VLDB 2014 Ph.D. workshop: an overview. *Proceedings of the VLDB Endowment*, 7(13):1719, August 2014. CODEN ???? ISSN 2150-8097.

Venkataraman:2014:DCG

[1188] Shivakumar Venkataraman and Divyakant Agrawal. Datacenters as computers: Google engineering & database research perspectives. *Proceedings of the VLDB Endowment*, 7(13):1720–1721, August 2014. CODEN ???? ISSN 2150-8097.

Plattner:2014:ICM

[1189] Hasso Plattner. The impact of columnar in-memory databases on enterprise systems: implications of eliminating transaction-maintained aggregates. *Proceedings of the VLDB Endowment*, 7(13):1722–1729, August 2014. CODEN ???? ISSN 2150-8097.

Markl:2014:BCD

[1190] Volker Markl. Breaking the chains: on declarative data analysis and data independence in the big data era. *Proceedings of the VLDB Endowment*, 7(13): 1730–1733, August 2014. CODEN ???? ISSN 2150-8097.

Neumann:2014:EHP

[1191] Thomas Neumann. Engineering high-performance database engines. *Proceedings of the VLDB Endowment*, 7 (13):1734–1741, August 2014. CODEN ???? ISSN 2150-8097.

Cao:2014:RLC

[1192] Wei Cao, Feng Yu, and Jiasen Xie. Realization of the low cost and high performance MySQL cloud database. *Proceedings of the VLDB Endowment*, 7 (13):1742–1747, August 2014. CODEN ???? ISSN 2150-8097.

Qin:2014:FCS

[1193] An Qin, Dianming Hu, Jun Liu, Wenjun Yang, and Dai Tan. Fatman:

cost-saving and reliable archival storage based on volunteer resources. *Proceedings of the VLDB Endowment*, 7 (13):1748–1753, August 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:DIR

[1194] Shiming Zhang, Yin Yang, Wei Fan, and Marianne Winslett. Design and implementation of a real-time interactive analytics system for large spatio-temporal data. *Proceedings of the VLDB Endowment*, 7(13):1754–1759, August 2014. CODEN ???? ISSN 2150-8097.

Dai:2014:PRS

[1195] Chaoyue Dai, Feng Qian, Wei Jiang, Zhoutian Wang, and Zenghong Wu. A personalized recommendation system for NetEase dating site. *Proceedings of the VLDB Endowment*, 7(13): 1760–1765, August 2014. CODEN ???? ISSN 2150-8097.

Ling:2014:GIH

[1196] Zheng Jye Ling, Quoc Trung Tran, Ju Fan, Gerald C. H. Koh, Thi Nguyen, Chuen Seng Tan, James W. L. Yip, and Meihui Zhang. GEMINI: an integrative healthcare analytics system. *Proceedings of the VLDB Endowment*, 7(13): 1766–1771, August 2014. CODEN ???? ISSN 2150-8097.

Zou:2014:MTD

[1197] Yongqiang Zou, Xing Jin, Yi Li, Zhimao Guo, Eryu Wang, and Bin Xiao. Mariana: Tencent deep learning platform and its applications. *Proceedings of the VLDB Endowment*, 7(13):1772–1777, August 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:YPC

[1198] Sai Wu, Chun Chen, Gang Chen, Ke Chen, Lidan Shou, Hui Cao, and He Bai. YZStack: provisioning customizable solution for big data. *Proceedings of the VLDB Endowment*, 7 (13):1778–1783, August 2014. CODEN ???? ISSN 2150-8097.

Klonatos:2014:EBE

[1199] Yannis Klonatos, Christoph Koch, Tiark Rompf, and Hassan Chafi. Errata for "Building efficient query engines in a high-level language": PVLDB **7**(10):853–864. *Proceedings of the VLDB Endowment*, 7(13):1784, August 2014. CODEN ???? ISSN 2150-8097. See [1077].

Lu:2014:SMM

[1200] Wei Lu, Shanshan Chen, Keqian Li, and Laks V. S. Lakshmanan. Show me the money: dynamic recommendations for revenue maximization. *Proceedings of the VLDB Endowment*, 7 (14):1785–1796, October 2014. CODEN ???? ISSN 2150-8097.

Lu:2014:SSG

[1201] Peng Lu, Gang Chen, Beng Chin Ooi, Hoang Tam Vo, and Sai Wu. ScalaGiST: scalable generalized search trees for MapReduce systems [innovative systems paper]. *Proceedings of the VLDB Endowment*, 7(14):1797–1808, October 2014. CODEN ???? ISSN 2150-8097.

Yang:2014:FPK

[1202] Mohan Yang, Bolin Ding, Surajit Chaudhuri, and Kaushik Chakrabarti. Finding patterns in a knowledge base using keywords to compose table answers. *Proceedings of the VLDB Endowment*, 7(14):1809–1820, October 2014. CODEN ???? ISSN 2150-8097.

Yan:2014:PAG

[1203] Da Yan, James Cheng, Kai Xing, Yi Lu, Wilfred Ng, and Yingyi Bu. Pregel algorithms for graph connectivity problems with performance guarantees. *Proceedings of the VLDB Endowment*, 7(14):1821–1832, October 2014. CODEN ???? ISSN 2150-8097.

Shang:2014:AAG

[1204] Zechao Shang and Jeffrey Xu Yu. Auto-approximation of graph computing. *Proceedings of the VLDB Endowment*, 7(14):1833–1844, October 2014. CODEN ???? ISSN 2150-8097.

Furche:2014:DTW

[1205] Tim Furche, Georg Gottlob, Giovanni Grasso, Xiaonan Guo, Giorgio Orsi, Christian Schallhart, and Cheng Wang. DIADEM: thousands of websites to a single database. *Proceedings of the VLDB Endowment*, 7(14):1845–1856, October 2014. CODEN ???? ISSN 2150-8097.

Wu:2014:UAQ

[1206] Wentao Wu, Xi Wu, Hakan Hacigümüs, and Jeffrey F. Naughton. Uncertainty aware query execution time prediction. *Proceedings of the VLDB Endowment*, 7(14):1857–1868, October 2014. CODEN ???? ISSN 2150-8097.

Konstantinidis:2014:OCS

[1207] George Konstantinidis and José Luis Ambite. Optimizing the chase: scalable data integration under constraints. *Proceedings of the VLDB Endowment*, 7(14):1869–1880, October 2014. CODEN ???? ISSN 2150-8097.

Athanassoulis:2014:BTA

[1208] Manos Athanassoulis and Anastasia Ailamaki. BF-tree: approximate tree indexing. *Proceedings of the VLDB Endowment*, 7(14):1881–1892, October 2014. CODEN ???? ISSN 2150-8097.

Tozun:2014:AAI

[1209] Pinar Tözün, Islam Atta, Anastasia Ailamaki, and Andreas Moshovos. ADDICT: advanced instruction chasing for transactions. *Proceedings of the VLDB Endowment*, 7(14):1893–1904, October 2014. CODEN ???? ISSN 2150-8097.

Alsubaiee:2014:ASO

[1210] Sattam Alsubaiee, Yasser Altowim, Hotham Altwaijry, Alexander Behm, Vinayak Borkar, Yingyi Bu, Michael Carey, Inci Cetindil, Madhusudan Cheelangi, Khurram Faraaz, Eugenia Gabrielova, Raman Grover, Zachary Heilbron, Young-Seok Kim, Chen Li, Guangqiang Li, Ji Mahn Ok, Nicola Onose, Pouria Pirzadeh, Vassilis Tsotras, Rares Vernica, Jian Wen, and Till Westmann. AsterixDB: a scalable, open source BDMS. *Proceedings of the VLDB Endowment*, 7(14):1905–1916, October 2014. CODEN ???? ISSN 2150-8097.

Xu:2014:LLB

[1211] Ning Xu, Lei Chen, and Bin Cui. LogGP: a log-based dynamic graph partitioning method. *Proceedings of the VLDB Endowment*, 7(14):1917–1928, October 2014. CODEN ???? ISSN 2150-8097.

Papadakis:2014:SMB

[1212] George Papadakis, George Papastefanatos, and Georgia Koutrika. Supervised meta-blocking. *Proceedings of the VLDB Endowment*, 7(14):1929–1940, October 2014. CODEN ???? ISSN 2150-8097.

Xie:2014:GTK

[1213] Min Xie, Laks V. S. Lakshmanan, and Peter T. Wood. Generating top-k packages via preference elicitation. *Proceedings of the VLDB Endowment*, 7 (14):1941–1952, October 2014. CODEN ???? ISSN 2150-8097.

Li:2014:FRQ

[1214] Rui Li, Alex X. Liu, Ann L. Wang, and Bezawada Bruhadeshwar. Fast range query processing with strong privacy protection for cloud computing. *Proceedings of the VLDB Endowment*, 7 (14):1953–1964, October 2014. CODEN ???? ISSN 2150-8097.

Gao:2014:FTP

[1215] Yihan Gao and Aditya Parameswaran. Finish them!: pricing algorithms for human computation. *Proceedings of the VLDB Endowment*, 7(14):1965–1976, October 2014. CODEN ???? ISSN 2150-8097.

Catasta:2014:TTC

[1216] Michele Catasta, Alberto Tonon, Djellel Eddine Difallah, Gianluca Demartini, Karl Aberer, and Philippe Cudre-Mauroux. TransactiveDB: tapping into collective human memories. *Proceedings of the VLDB Endowment*, 7(14): 1977–1980, October 2014. CODEN ???? ISSN 2150-8097.

Yan:2014:BBC

[1217] Da Yan, James Cheng, Yi Lu, and Wilfred Ng. Blogel: a block-centric framework for distributed computation on real-world graphs. *Proceedings of the VLDB Endowment*, 7(14):1981–1992, October 2014. CODEN ???? ISSN 2150-8097.

Liagouris:2014:EII

[1218] John Liagouris and Manolis Terrovitis. Efficient identification of implicit facts in incomplete OWL2-EL knowledge bases. *Proceedings of the VLDB Endowment*, 7(14):1993–2004, October 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:WCA

[1219] Chen Jason Zhang, Yongxin Tong, and Lei Chen. Where to: crowd-aided path selection. *Proceedings of the VLDB Endowment*, 7(14):2005–2016, October 2014. CODEN ???? ISSN 2150-8097.

Huang:2014:LSR

[1220] Yan Huang, Favyen Bastani, Ruoming Jin, and Xiaoyang Sean Wang. Large scale real-time ridesharing with service guarantee on road networks. *Proceedings of the VLDB Endowment*, 7(14): 2017–2028, October 2014. CODEN ???? ISSN 2150-8097.

Sun:2014:SSA

[1221] Yifang Sun, Wei Wang, Jianbin Qin, Ying Zhang, and Xuemin Lin. SRS: solving c-approximate nearest neighbor queries in high dimensional Euclidean space with a tiny index. *Proceedings of the VLDB Endowment*, 8(1):1–12, September 2014. CODEN ???? ISSN 2150-8097.

Dallachiesa:2014:TKN

[1222] Michele Dallachiesa, Themis Palpanas, and Ihab F. Ilyas. Top-k nearest neighbor search in uncertain data series. *Proceedings of the VLDB Endowment*, 8(1):13–24, September 2014. CODEN ???? ISSN 2150-8097.

Li:2014:RBP

[1223] Jiexing Li, Jeffrey Naughton, and Rimma V. Nehme. Resource bricolage for parallel database systems. *Proceedings of the VLDB Endowment*, 8(1): 25–36, September 2014. CODEN ???? ISSN 2150-8097.

Graefe:2014:MPB

[1224] Goetz Graefe, Haris Volos, Hideaki Kimura, Harumi Kuno, Joseph Tucek, Mark Lillibridge, and Alistair Veitch. In-memory performance for big data. *Proceedings of the VLDB Endowment*, 8(1):37–48, September 2014. CODEN ???? ISSN 2150-8097.

Long:2014:TSM

[1225] Cheng Long, Raymond Chi-Wing Wong, and H. V. Jagadish. Trajectory simplification: on minimizing the direction-based error. *Proceedings of the VLDB Endowment*, 8(1):49–60, September 2014. CODEN ???? ISSN 2150-8097.

ElGebaly:2014:IIE

[1226] Kareem El Gebaly, Parag Agrawal, Lukasz Golab, Flip Korn, and Divesh Srivastava. Interpretable and informative explanations of outcomes. *Proceedings of the VLDB Endowment*, 8(1): 61–72, September 2014. CODEN ???? ISSN 2150-8097.

Li:2014:CIN

[1227] Fei Li and H. V. Jagadish. Constructing an interactive natural language interface for relational databases. *Proceedings of the VLDB Endowment*, 8 (1):73–84, September 2014. CODEN ???? ISSN 2150-8097.

Zhu:2014:LGD

[1228] Yuanyuan Zhu, Jeffrey Xu Yu, and Lu Qin. Leveraging graph dimensions in online graph search. *Proceedings of the VLDB Endowment*, 8(1):85–96, September 2014. CODEN ???? ISSN 2150-8097.

Sidlauskas:2014:SJM

[1229] Darius Sidlauskas and Christian S. Jensen. Spatial joins in main memory: implementation matters! *Proceedings of the VLDB Endowment*, 8(1):97–100, September 2014. CODEN ???? ISSN 2150-8097.

Wang:2014:SES

[1230] Xiaoyang Wang, Ying Zhang, Wenjie Zhang, Xuemin Lin, and Wei Wang. Selectivity estimation on streaming spatio-textual data using local correlations. *Proceedings of the VLDB Endowment*, 8(2):101–112, October 2014. CODEN ???? ISSN 2150-8097.

Li:2014:PMK

[1231] Chuanwen Li, Yu Gu, Jianzhong Qi, Ge Yu, Rui Zhang, and Wang Yi. Processing moving k NN queries using influential neighbor sets. *Proceedings of the VLDB Endowment*, 8(2):113–124, October 2014. CODEN ???? ISSN 2150-8097.

Mozafari:2014:SCS

[1232] Barzan Mozafari, Purna Sarkar, Michael Franklin, Michael Jordan, and Samuel Madden. Scaling up crowdsourcing to very large datasets: a case for active learning. *Proceedings of the VLDB Endowment*, 8(2):125–136, October 2014. CODEN ???? ISSN 2150-8097.

Yang:2014:CCO

[1233] Dingyu Yang, Dongxiang Zhang, Kian-Lee Tan, Jian Cao, and Frédéric Le Mouël. CANDS: continuous optimal navigation via distributed stream processing. *Proceedings of the VLDB Endowment*, 8(2):137–148, October 2014. CODEN ???? ISSN 2150-8097.

Begum:2014:RTS

[1234] Nurjahan Begum and Eamonn Keogh. Rare time series motif discovery from unbounded streams. *Proceedings of the VLDB Endowment*, 8(2):149–160, October 2014. CODEN ???? ISSN 2150-8097.

Bu:2014:PBG

[1235] Yingyi Bu, Vinayak Borkar, Jianfeng Jia, Michael J. Carey, and Tyson Condie. Pregelix: Big(ger) graph analytics on a dataflow engine. *Proceedings of the VLDB Endowment*, 8(2): 161–172, October 2014. CODEN ???? ISSN 2150-8097.

Sridharan:2014:PRC

[1236] Shriram Sridharan and Jignesh M. Patel. Profiling R on a contemporary processor. *Proceedings of the VLDB Endowment*, 8(2):173–184, October 2014. CODEN ???? ISSN 2150-8097.

Bailis:2014:CAD

[1237] Peter Bailis, Alan Fekete, Michael J. Franklin, Ali Ghodsi, Joseph M. Hellerstein, and Ion Stoica. Coordination avoidance in database systems. *Proceedings of the VLDB Endowment*, 8 (3):185–196, November 2014. CODEN ???? ISSN 2150-8097.

Zeng:2014:QSI

[1238] Qiang Zeng, Jignesh M. Patel, and David Page. QuickFOIL: scalable inductive logic programming. *Proceedings of the VLDB Endowment*, 8(3): 197–208, November 2014. CODEN ???? ISSN 2150-8097.

Yu:2014:SAE

[1239] Xiangyao Yu, George Bezerra, Andrew Pavlo, Srinivas Devadas, and Michael Stonebraker. Staring into the abyss: an evaluation of concurrency control with one thousand cores. *Proceedings of the VLDB Endowment*, 8(3):209–220, November 2014. CODEN ???? ISSN 2150-8097.

Trummer:2014:MOP

[1240] Immanuel Trummer and Christoph Koch. Multi-objective parametric query optimization. *Proceedings of the VLDB Endowment*, 8(3):221–232, November 2014. CODEN ???? ISSN 2150-8097.

Giceva:2014:DQP

[1241] Jana Giceva, Gustavo Alonso, Timothy Roscoe, and Tim Harris. Deployment of query plans on multicores. *Proceedings of the VLDB Endowment*, 8 (3):233–244, November 2014. CODEN ???? ISSN 2150-8097.

Taft:2014:SFG

[1242] Rebecca Taft, Essam Mansour, Marco Serafini, Jennie Duggan, Aaron J. Elmore, Ashraf Aboulnaga, Andrew Pavlo, and Michael Stonebraker. E-store: fine-grained elastic partitioning for distributed transaction processing systems. *Proceedings of the VLDB Endowment*, 8(3):245–256, November 2014. CODEN ???? ISSN 2150-8097.

Thirumuruganathan:2014:BIM

[1243] Saravanan Thirumuruganathan, Habibur Rahman, Sofiane Abbar, and Gautam Das. Beyond itemsets: mining frequent featuresets over structured items. *Proceedings of the VLDB Endowment*, 8 (3):257–268, November 2014. CODEN ???? ISSN 2150-8097.

Zhang:2014:ICD

[1244] Jun Zhang, Chaokun Wang, Jianmin Wang, and Jeffrey Xu Yu. Inferring continuous dynamic social influence and personal preference for temporal behavior prediction. *Proceedings of the VLDB Endowment*, 8(3):269–280, November 2014. CODEN ???? ISSN 2150-8097.

Lu:2014:LSD

[1245] Yi Lu, James Cheng, Da Yan, and Huanhuan Wu. Large-scale distributed graph computing systems: an experimental evaluation. *Proceedings of the VLDB Endowment*, 8(3):281–292, November 2014. CODEN ???? ISSN 2150-8097.

Inoue:2014:FSI

[1246] Hiroshi Inoue, Moriyoshi Ohara, and Kenjiro Taura. Faster set intersection with SIMD instructions by reducing branch mispredictions. *Proceedings of the VLDB Endowment*, 8(3):293–304, November 2014. CODEN ???? ISSN 2150-8097.

El-Kishky:2014:STP

[1247] Ahmed El-Kishky, Yanglei Song, Chi Wang, Clare R. Voss, and Jiawei Han. Scalable topical phrase mining from text corpora. *Proceedings of the VLDB Endowment*, 8(3):305–316, November 2014. CODEN ???? ISSN 2150-8097.

Tao:2014:ETK

[1248] Wenbo Tao, Minghe Yu, and Guoliang Li. Efficient top-k simrank-based similarity join. *Proceedings of the VLDB Endowment*, 8(3):317–328, November 2014. CODEN ???? ISSN 2150-8097.

He:2014:CQC

[1249] Jiong He, Shuhao Zhang, and Bingsheng He. In-cache query co-processing on coupled CPU–GPU architectures. *Proceedings of the VLDB Endowment*, 8(4):329–340, December 2014. CODEN ???? ISSN 2150-8097.

Fujiwara:2014:SMR

[1250] Yasuhiro Fujiwara, Go Irie, Shari Kuroyama, and Makoto Onizuka. Scaling manifold ranking based image retrieval. *Proceedings of the VLDB Endowment*, 8(4):341–352, December 2014. CODEN ???? ISSN 2150-8097.

Barber:2014:MEH

[1251] R. Barber, G. Lohman, I. Pandis, V. Raman, R. Sidle, G. Attaluri, N. Chainani, S. Lightstone, and D. Sharpe. Memory-efficient hash joins. *Proceedings of the VLDB Endowment*, 8(4):353–364, December 2014. CODEN ???? ISSN 2150-8097.

Alexe:2014:PAI

[1252] Bogdan Alexe, Mary Roth, and Wang-Chiew Tan. Preference-aware integration of temporal data. *Proceedings of the VLDB Endowment*, 8(4):365–376, December 2014. CODEN ???? ISSN 2150-8097.

Zhou:2014:MSD

[1253] Chang Zhou, Jun Gao, Binbin Sun, and Jeffrey Xu Yu. MOCgraph: scalable distributed graph processing using message online computing. *Proceedings of the VLDB Endowment*, 8 (4):377–388, December 2014. CODEN ???? ISSN 2150-8097.

Huang:2014:NAL

[1254] Jian Huang, Karsten Schwan, and Moinuddin K. Qureshi. NVRAM-aware logging in transaction systems. *Proceedings of the VLDB Endowment*, 8 (4):389–400, December 2014. CODEN ???? ISSN 2150-8097.

Chandramouli:2014:THP

[1255] Badrish Chandramouli, Jonathan Goldstein, Mike Barnett, Robert DeLine, Danyel Fisher, John C. Platt, James F. Terwilliger, and John Wernsing. Trill: a high-performance incremental query processor for diverse analytics. *Proceedings of the VLDB Endowment*, 8(4):401–412, December 2014. CODEN ???? ISSN 2150-8097.

Song:2014:EPM

[1256] Chunyao Song, Tingjian Ge, Cindy Chen, and Jie Wang. Event pattern matching over graph streams. *Proceedings of the VLDB Endowment*, 8(4): 413–424, December 2014. CODEN ???? ISSN 2150-8097.

Li:2014:CAA

[1257] Qi Li, Yaliang Li, Jing Gao, Lu Su, Bo Zhao, Murat Demirbas, Wei Fan, and Jiawei Han. A confidence-aware approach for truth discovery on long-tail data. *Proceedings of the VLDB Endowment*, 8(4):425–436, December 2014. CODEN ???? ISSN 2150-8097.

Shen:2014:FFR

[1258] Yanyan Shen, Gang Chen, H. V. Jagadish, Wei Lu, Beng Chin Ooi, and Bogdan Marius Tudor. Fast failure recovery in distributed graph processing systems. *Proceedings of the VLDB Endowment*, 8(4):437–448, December 2014. CODEN ???? ISSN 2150-8097.

Then:2014:MME

[1259] Manuel Then, Moritz Kaufmann, Fernando Chirigati, Tuan-Anh Hoang-Vu, Kien Pham, Alfons Kemper, Thomas Neumann, and Huy T. Vo. The more the merrier: efficient multi-source graph traversal. *Proceedings of the VLDB Endowment*, 8(4):449–460, December 2014. CODEN ???? ISSN 2150-8097.

Wandelt:2015:MCS

[1260] Sebastian Wandelt and Ulf Leser. MRCSI: compressing and searching string collections with multiple references. *Proceedings of the VLDB Endowment*, 8(5):461–472, January 2015. CODEN ???? ISSN 2150-8097.

Ding:2015:YFC

[1261] Rui Ding, Qiang Wang, Yingnong Dang, Qiang Fu, Haidong Zhang, and Dongmei Zhang. YADING: fast clustering of large-scale time series data. *Proceedings of the VLDB Endowment*, 8(5):473–484, January 2015. CODEN ???? ISSN 2150-8097.

Wu:2015:HWS

[1262] Ting Wu, Lei Chen, Pan Hui, Chen Jason Zhang, and Weikai Li. Hear the whole story: towards the diversity of opinion in crowdsourcing markets. *Proceedings of the VLDB Endowment*, 8 (5):485–496, January 2015. CODEN ???? ISSN 2150-8097.

Chatzistergiou:2015:RUR

[1263] Andreas Chatzistergiou, Marcelo Cintra, and Stratis D. Viglas. REWIND: recovery write-ahead system for inmemory non-volatile data-structures. *Proceedings of the VLDB Endowment*, 8(5):497–508, January 2015. CODEN ???? ISSN 2150-8097.

Li:2015:ICS

[1264] Rong-Hua Li, Lu Qin, Jeffrey Xu Yu, and Rui Mao. Influential community search in large networks. *Proceedings of the VLDB Endowment*, 8(5):509–520, January 2015. CODEN ???? ISSN 2150-8097.

Kim:2015:RSV

[1265] Albert Kim, Eric Blais, Aditya Parameswaran, Piotr Indyk, Sam Madden, and Ronitt Rubinfeld. Rapid sampling for visualizations with ordering guarantees. *Proceedings of the VLDB Endowment*, 8(5):521–532, January 2015. CODEN ???? ISSN 2150-8097.

Chang:2015:OEE

[1266] Lijun Chang, Xuemin Lin, Wenjie Zhang, Jeffrey Xu Yu, Ying Zhang, and Lu Qin. Optimal enumeration: efficient top-k tree matching. *Proceedings of the VLDB Endowment*, 8(5):533–544, January 2015. CODEN ???? ISSN 2150-8097.

Lazerson:2015:MDS

[1267] Arnon Lazerson, Izchak Sharfman, Daniel Keren, Assaf Schuster, Minos Garofalakis, and Vasilis Samoladas. Monitoring distributed streams using convex decompositions. *Proceedings of the VLDB Endowment*, 8(5):545–556, January 2015. CODEN ???? ISSN 2150-8097.

Li:2015:UGD

[1268] Kun Li, Daisy Zhe Wang, Alin Dobra, and Christopher Dudley. UDA-GIST: an in-database framework to unify data-parallel and state-parallel analytics. *Proceedings of the VLDB Endowment*, 8(5):557–568, January 2015. CODEN ???? ISSN 2150-8097.

Yu:2015:EPP

[1269] Weiren Yu and Julie A. McCann. Efficient partial-pairs SimRank search on large networks. *Proceedings of the VLDB Endowment*, 8(5):569–580, January 2015. CODEN ???? ISSN 2150-8097.

Gatterbauer:2015:LSP

[1270] Wolfgang Gatterbauer, Stephan Günnemann, Danai Koutra, and Christos Faloutsos. Linearized and single-pass belief propagation. *Proceedings of the VLDB Endowment*, 8(5):581–592, January 2015. CODEN ???? ISSN 2150-8097.

Do:2015:MRM

[1271] Loc Do, Hady W. Lauw, and Ke Wang. Mining revenue-maximizing bundling configuration. *Proceedings of the*

VLDB Endowment, 8(5):593–604, January 2015. CODEN ???? ISSN 2150-8097.

Yang:2015:RKN

[1272] Shiyu Yang, Muhammad Aamir Cheema, Xuemin Lin, and Wei Wang. Reverse k nearest neighbors query processing: experiments and analysis. *Proceedings of the VLDB Endowment*, 8 (5):605–616, January 2015. CODEN ???? ISSN 2150-8097.

Ren:2015:EVR

[1273] Xuguang Ren and Junhu Wang. Exploiting vertex relationships in speeding up subgraph isomorphism over large graphs. *Proceedings of the VLDB Endowment*, 8(5):617–628, January 2015. CODEN ???? ISSN 2150-8097.

Gatterbauer:2015:ALI

[1274] Wolfgang Gatterbauer and Dan Suciu. Approximate lifted inference with probabilistic databases. *Proceedings of the VLDB Endowment*, 8(5):629–640, January 2015. CODEN ???? ISSN 2150-8097.

Vesdapunt:2015:ECA

[1275] Norases Vesdapunt, Kedar Bellare, and Nilesh Dalvi. Errata for “Crowdsourcing algorithms for entity resolution”: (PVLDB **7**(12): 1071–1082). *Proceedings of the VLDB Endowment*, 8(5): 641, January 2015. CODEN ???? ISSN 2150-8097.

Jha:2015:IMM

[1276] Saurabh Jha, Bingsheng He, Mian Lu, Xuntao Cheng, and Huynh Phung Huynh. Improving main memory hash joins on Intel Xeon Phi processors: an experimental approach. *Proceedings of the VLDB Endowment*, 8(6):642–653, February 2015. CODEN ???? ISSN 2150-8097.

Hammoud:2015:DDR

[1277] Mohammad Hammoud, Dania Abed Rabbou, Reza Nouri, Seyed-Mehdi-Reza Beheshti, and Sherif Sakr. DREAM: distributed RDF engine with adaptive query planner and minimal communication. *Proceedings of the VLDB Endowment*, 8(6):654–665, February 2015. CODEN ???? ISSN 2150-8097.

Chen:2015:OTA

[1278] Shuo Chen, Ju Fan, Guoliang Li, Jianhua Feng, Kian lee Tan, and Jinhui Tang. Online topic-aware influence maximization. *Proceedings of the VLDB Endowment*, 8(6):666–677, February 2015. CODEN ???? ISSN 2150-8097.

Nazi:2015:WWF

[1279] Azade Nazi, Zhuojie Zhou, Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Walk, not wait: faster sampling over online social networks. *Proceedings of the VLDB Endowment*, 8(6):678–689, February 2015. CODEN ???? ISSN 2150-8097.

Benedikt:2015:QAP

[1280] Michael Benedikt, Julien Leblay, and Efthymia Tsamoura. Querying with access patterns and integrity constraints. *Proceedings of the VLDB Endowment*, 8(6):690–701, February 2015. CODEN ???? ISSN 2150-8097.

Tangwongsan:2015:GIS

[1281] Kanat Tangwongsan, Martin Hirzel, Scott Schneider, and Kun-Lung Wu.

General incremental sliding-window aggregation. *Proceedings of the VLDB Endowment*, 8(7):702–713, February 2015. CODEN ???? ISSN 2150-8097.

Lei:2015:SER

[1282] Chuan Lei, Zhongfang Zhuang, Elke A. Rundensteiner, and Mohamed Eltabakh. Shared execution of recurring workloads in MapReduce. *Proceedings of the VLDB Endowment*, 8(7):714–725, February 2015. CODEN ???? ISSN 2150-8097.

Narasayya:2015:SBP

[1283] Vivek Narasayya, Ishai Menache, Mohit Singh, Feng Li, Manoj Syamala, and Surajit Chaudhuri. Sharing buffer pool memory in multi-tenant relational database-as-a-service. *Proceedings of the VLDB Endowment*, 8(7):726–737, February 2015. CODEN ???? ISSN 2150-8097.

Gao:2015:AWQ

[1284] Yunjun Gao, Qing Liu, Gang Chen, Baihua Zheng, and Linlin Zhou. Answering why-not questions on reverse top-k queries. *Proceedings of the VLDB Endowment*, 8(7):738–749, February 2015. CODEN ???? ISSN 2150-8097.

Papadopoulos:2015:PAP

[1285] Dimitrios Papadopoulos, Charalampos Papamanthou, Roberto Tamassia, and Nikos Triandopoulos. Practical authenticated pattern matching with optimal proof size. *Proceedings of the VLDB Endowment*, 8(7):750–761, February 2015. CODEN ???? ISSN 2150-8097.

Loghin:2015:PSB

[1286] Dumitrel Loghin, Bogdan Marius Tudor, Hao Zhang, Beng Chin Ooi, and Yong Meng Teo. A performance study of big data on small nodes. *Proceedings of the VLDB Endowment*, 8(7): 762–773, February 2015. CODEN ???? ISSN 2150-8097.

Papenbrock:2015:DCB

[1287] Thorsten Papenbrock, Sebastian Kruse, Jorge-Arnulfo Quiané-Ruiz, and Felix Naumann. Divide & conquer-based inclusion dependency discovery. *Proceedings of the VLDB Endowment*, 8(7): 774–785, February 2015. CODEN ???? ISSN 2150-8097.

Chen:2015:PBT

[1288] Shimin Chen and Qin Jin. Persistent B+-trees in non-volatile main memory. *Proceedings of the VLDB Endowment*, 8(7):786–797, February 2015. CODEN ???? ISSN 2150-8097.

Wu:2015:RLC

[1289] Yubao Wu, Ruoming Jin, Jing Li, and Xiang Zhang. Robust local community detection: on free rider effect and its elimination. *Proceedings of the VLDB Endowment*, 8(7):798–809, February 2015. CODEN ???? ISSN 2150-8097.

Fan:2015:UCC

[1290] Hua Fan, Aditya Ramaraju, Marlon McKenzie, Wojciech Golab, and Bernard Wong. Understanding the causes of consistency anomalies in Apache Cassandra. *Proceedings of the VLDB Endowment*, 8(7):810–813, February 2015. CODEN ???? ISSN 2150-8097.

Aslay:2015:VMM

[1291] Cigdem Aslay, Wei Lu, Francesco Bonchi, Amit Goyal, and Laks V. S.

Lakshmanan. Viral marketing meets social advertising: ad allocation with minimum regret. *Proceedings of the VLDB Endowment*, 8(7):814–825, February 2015. CODEN ???? ISSN 2150-8097.

Chu:2015:ASD

[1292] Lingyang Chu, Shuhui Wang, Siyuan Liu, Qingming Huang, and Jian Pei. ALID: scalable dominant cluster detection. *Proceedings of the VLDB Endowment*, 8(8):826–837, April 2015. CODEN ???? ISSN 2150-8097.

Shao:2015:ESS

[1293] Yingxia Shao, Bin Cui, Lei Chen, Mingming Liu, and Xing Xie. An efficient similarity search framework for SimRank over large dynamic graphs. *Proceedings of the VLDB Endowment*, 8(8):838–849, April 2015. CODEN ???? ISSN 2150-8097.

Ahmad:2015:CMD

[1294] Muhammad Yousuf Ahmad and Bettina Kemme. Compaction management in distributed key–value datastores. *Proceedings of the VLDB Endowment*, 8(8):850–861, April 2015. CODEN ???? ISSN 2150-8097.

Guerraoui:2015:DPD

[1295] Rachid Guerraoui, Anne-Marie Kermarrec, Rhicheek Patra, and Mahsa Taziki. D2P: distance-based differential privacy in recommenders. *Proceedings of the VLDB Endowment*, 8(8):862–873, April 2015. CODEN ???? ISSN 2150-8097.

Mitliagkas:2015:FFP

[1296] Ioannis Mitliagkas, Michael Borokhovich, Alexandros G. Dimakis, and Constantine Caramanis. FrogWild!: fast PageRank approximations on graph engines. *Proceedings of the VLDB Endowment*, 8(8):874–885, April 2015. CODEN ???? ISSN 2150-8097.

Vattani:2015:OPC

[1297] Andrea Vattani, Flavio Chierichetti, and Keegan Lowenstein. Optimal probabilistic cache stampede prevention. *Proceedings of the VLDB Endowment*, 8(8):886–897, April 2015. CODEN ???? ISSN 2150-8097.

Potti:2015:DNP

[1298] Navneet Potti and Jignesh M. Patel. DAQ: a new paradigm for approximate query processing. *Proceedings of the VLDB Endowment*, 8(9):898–909, May 2015. CODEN ???? ISSN 2150-8097.

Anciaux:2015:SSE

[1299] Nicolas Anciaux, Saliha Lallali, Iulian Sandu Popa, and Philippe Pucheral. A scalable search engine for mass storage smart objects. *Proceedings of the VLDB Endowment*, 8(9):910–921, May 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:SMD

[1300] Lanjun Wang, Shuo Zhang, Juwei Shi, Limei Jiao, Oktie Hassanzadeh, Jia Zou, and Chen Wangz. Schema management for document stores. *Proceedings of the VLDB Endowment*, 8(9):922–933, May 2015. CODEN ???? ISSN 2150-8097.

Schuhknecht:2015:SDS

[1301] Felix Martin Schuhknecht, Pankaj Khanchandani, and Jens Dittrich. On the surprising difficulty of simple things: the case of radix partitioning. *Proceedings of the VLDB Endowment*, 8(9):934–937, May 2015. CODEN ???? ISSN 2150-8097.

Dong:2015:KBT

[1302] Xin Luna Dong, Evgeniy Gabrilovich, Kevin Murphy, Van Dang, Wilko Horn, Camillo Lugaresi, Shaohua Sun, and Wei Zhang. Knowledge-based trust: estimating the trustworthiness of web sources. *Proceedings of the VLDB Endowment*, 8(9):938–949, May 2015. CODEN ???? ISSN 2150-8097.

Han:2015:GUB

[1303] Minyang Han and Khuzaima Daudjee. Giraph unchained: barrierless asynchronous parallel execution in Pregel-like graph processing systems. *Proceedings of the VLDB Endowment*, 8(9):950–961, May 2015. CODEN ???? ISSN 2150-8097.

Bogh:2015:WEP

[1304] Kenneth S. Bøgh, Sean Chester, and Ira Assent. Work-efficient parallel skyline computation for the GPU. *Proceedings of the VLDB Endowment*, 8(9):962–973, May 2015. CODEN ???? ISSN 2150-8097.

Lai:2015:SSE

[1305] Longbin Lai, Lu Qin, Xuemin Lin, and Lijun Chang. Scalable subgraph enumeration in MapReduce. *Proceedings of the VLDB Endowment*, 8(10):974–985, June 2015. CODEN ???? ISSN 2150-8097.

Finis:2015:IHD

[1306] Jan Finis, Robert Brunel, Alfons Kemper, Thomas Neumann, Norman May, and Franz Faerber. Indexing highly dynamic hierarchical data. *Proceedings of the VLDB Endowment*, 8(10):986–997, June 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:CDS

[1307] Meng Wang, Chaokun Wang, Jeffrey Xu Yu, and Jun Zhang. Community detection in social networks: an in-depth benchmarking study with a procedure-oriented framework. *Proceedings of the VLDB Endowment*, 8(10):998–1009, June 2015. CODEN ???? ISSN 2150-8097.

Kazemi:2015:GGM

[1308] Ehsan Kazemi, S. Hamed Hassani, and Matthias Grossglauser. Growing a graph matching from a handful of seeds. *Proceedings of the VLDB Endowment*, 8(10):1010–1021, June 2015. CODEN ???? ISSN 2150-8097.

Cheng:2015:RDB

[1309] Peng Cheng, Xiang Lian, Zhao Chen, Rui Fu, Lei Chen, Jinsong Han, and Jizhong Zhao. Reliable diversity-based spatial crowdsourcing by moving workers. *Proceedings of the VLDB Endowment*, 8(10):1022–1033, June 2015. CODEN ???? ISSN 2150-8097.

Zhou:2015:LHF

[1310] Zhuojie Zhou, Nan Zhang, and Gautam Das. Leveraging history for faster sampling of online social networks. *Proceedings of the VLDB Endowment*, 8(10):1034–1045, June 2015. CODEN ???? ISSN 2150-8097.

Ding:2015:TFE

[1311] Yufei Ding, Xipeng Shen, Madanlal Musuvathi, and Todd Mytkowicz. TOP: a framework for enabling algorithmic optimizations for distance-related problems. *Proceedings of the*

VLDB Endowment, 8(10):1046–1057, June 2015. CODEN ???? ISSN 2150-8097.

Leis:2015:EPW

[1312] Viktor Leis, Kan Kundhikanjana, Alfons Kemper, and Thomas Neumann. Efficient processing of window functions in analytical SQL queries. *Proceedings of the VLDB Endowment*, 8 (10):1058–1069, June 2015. CODEN ???? ISSN 2150-8097.

Li:2015:RTT

[1313] Yuchen Li, Dongxiang Zhang, and Kian-Lee Tan. Real-time targeted influence maximization for online advertisements. *Proceedings of the VLDB Endowment*, 8(10):1070–1081, June 2015. CODEN ???? ISSN 2150-8097.

Papenbrock:2015:FDD

[1314] Thorsten Papenbrock, Jens Ehrlich, Jannik Marten, Tommy Neubert, Jan-Peer Rudolph, Martin Schönberg, Jakob Zwiener, and Felix Naumann. Functional dependency discovery: an experimental evaluation of seven algorithms. *Proceedings of the VLDB Endowment*, 8(10):1082–1093, June 2015. CODEN ???? ISSN 2150-8097.

Kalinin:2015:SEI

[1315] Alexander Kalinin, Ugur Cetintemel, and Stan Zdonik. Searchlight: enabling integrated search and exploration over large multidimensional data. *Proceedings of the VLDB Endowment*, 8(10): 1094–1105, June 2015. CODEN ???? ISSN 2150-8097.

Rahman:2015:PID

[1316] Md Farhadur Rahman, Weimo Liu, Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Privacy implications of database ranking. *Proceedings of the VLDB Endowment*, 8(10): 1106–1117, June 2015. CODEN ???? ISSN 2150-8097.

Kohler:2015:PCS

[1317] Henning Köhler, Sebastian Link, and Xiaofang Zhou. Possible and certain SQL keys. *Proceedings of the VLDB Endowment*, 8(11):1118–1129, July 2015. CODEN ???? ISSN 2150-8097.

Tang:2015:SSJ

[1318] Yu Tang, Yilun Cai, and Nikos Mamoulis. Scaling similarity joins over tree-structured data. *Proceedings of the VLDB Endowment*, 8(11):1130–1141, July 2015. CODEN ???? ISSN 2150-8097.

Rahman:2015:WSE

[1319] Habibur Rahman, Saravanan Thirumuruganathan, Senjuti Basu Roy, Sihem Amer-Yahia, and Gautam Das. Worker skill estimation in team-based tasks. *Proceedings of the VLDB Endowment*, 8(11):1142–1153, July 2015. CODEN ???? ISSN 2150-8097.

He:2015:DDP

[1320] Xi He, Graham Cormode, Ashwin Machanavajjhala, Cecilia M. Procopiuc, and Divesh Srivastava. DPT: differentially private trajectory synthesis using hierarchical reference systems. *Proceedings of the VLDB Endowment*, 8(11):1154–1165, July 2015. CODEN ???? ISSN 2150-8097.

Li:2015:SSA

[1321] Boduo Li, Yanlei Diao, and Prashant Shenoy. Supporting scalable analytics with latency constraints. *Proceedings of the VLDB Endowment*, 8(11):1166–1177, July 2015. CODEN ???? ISSN 2150-8097.

Shiokawa:2015:SEA

[1322] Hiroaki Shiokawa, Yasuhiro Fujiwara, and Makoto Onizuka. SCAN++: efficient algorithm for finding clusters, hubs and outliers on large-scale graphs. *Proceedings of the VLDB Endowment*, 8(11):1178–1189, July 2015. CODEN ???? ISSN 2150-8097.

Faleiro:2015:RSM

[1323] Jose M. Faleiro and Daniel J. Abadi. Rethinking serializable multiversion concurrency control. *Proceedings of the VLDB Endowment*, 8(11):1190–1201, July 2015. CODEN ???? ISSN 2150-8097.

Brancotte:2015:RAT

[1324] Bryan Brancotte, Bo Yang, Guillaume Blin, Sarah Cohen-Boulakia, Alain Denise, and Sylvie Hamel. Rank aggregation with ties: experiments and analysis. *Proceedings of the VLDB Endowment*, 8(11):1202–1213, July 2015. CODEN ???? ISSN 2150-8097.

Sundaram:2015:GHP

[1325] Narayanan Sundaram, Nadathur Satish, Md Mostofa Ali Patwary, Subramanya R. Dulloor, Michael J. Anderson, Satya Gautam Vadlamudi, Dipankar Das, and Pradeep Dubey. GraphMat: high performance graph analytics made productive. *Proceedings of the VLDB Endowment*, 8(11): 1214–1225, July 2015. CODEN ???? ISSN 2150-8097.

Zhang:2015:MKC

[1326] Kai Zhang, Kaibo Wang, Yuan Yuan, Lei Guo, Rubao Lee, and Xiaodong Zhang. Mega-KV: a case for GPUs to maximize the throughput of in-memory key–value stores. *Proceedings of the VLDB Endowment*, 8(11):1226–1237, July 2015. CODEN ???? ISSN 2150-8097.

Kim:2015:TSI

[1327] Jinha Kim, Hyungyu Shin, Wook-Shin Han, Sungpack Hong, and Hassan Chafi. Taming subgraph isomorphism for RDF query processing. *Proceedings of the VLDB Endowment*, 8(11):1238–1249, July 2015. CODEN ???? ISSN 2150-8097.

Jiang:2015:SPI

[1328] Lilong Jiang and Arnab Nandi. SnapToQuery: providing interactive feedback during exploratory query specification. *Proceedings of the VLDB Endowment*, 8(11):1250–1261, July 2015. CODEN ???? ISSN 2150-8097.

Zhou:2015:GFI

[1329] Yang Zhou, Ling Liu, Kisung Lee, and Qi Zhang. GraphTwist: fast iterative graph computation with two-tier optimizations. *Proceedings of the VLDB Endowment*, 8(11):1262–1273, July 2015. CODEN ???? ISSN 2150-8097.

Inoue:2015:SCF

[1330] Hiroshi Inoue and Kenjiro Taura. SIMD- and cache-friendly algorithm for sorting an array of structures. *Proceedings of the VLDB Endowment*, 8(11): 1274–1285, July 2015. CODEN ???? ISSN 2150-8097.

Song:2015:EDI

[1331] Shaoxu Song, Aoqian Zhang, Lei Chen, and Jianmin Wang. Enriching data imputation with extensive similarity neighbors. *Proceedings of the VLDB Endowment*, 8(11):1286–1297, July 2015. CODEN ???? ISSN 2150-8097.

Makreshanski:2015:LSE

[1332] Darko Makreshanski, Justin Levandoski, and Ryan Stutsman. To lock, swap, or elide: on the interplay of hardware transactional memory and lock-free indexing. *Proceedings of the VLDB Endowment*, 8(11):1298–1309, July 2015. CODEN ???? ISSN 2150-8097.

Shin:2015:IKB

[1333] Jaeho Shin, Sen Wu, Feiran Wang, Christopher De Sa, Ce Zhang, and Christopher Ré. Incremental knowledge base construction using DeepDive. *Proceedings of the VLDB Endowment*, 8(11):1310–1321, July 2015. CODEN ???? ISSN 2150-8097.

Qian:2015:LUP

[1334] Li Qian, Jinyang Gao, and H. V. Jagadish. Learning user preferences by adaptive pairwise comparison. *Proceedings of the VLDB Endowment*, 8(11): 1322–1333, July 2015. CODEN ???? ISSN 2150-8097.

Liu:2015:AEL

[1335] Weimo Liu, Md Farhadur Rahman, Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Aggregate estimations over location based services. *Proceedings of the VLDB Endowment*, 8(12):1334–1345, August 2015. CODEN ???? ISSN 2150-8097.

Bhattacherjee:2015:PDV

[1336] Souvik Bhattacherjee, Amit Chavan, Silu Huang, Amol Deshpande, and Aditya Parameswaran. Principles of dataset versioning: exploring the recreation/storage tradeoff. *Proceedings of the VLDB Endowment*, 8(12):1346–1357, August 2015. CODEN ???? ISSN 2150-8097.

He:2015:SJJ

[1337] Yeye He, Kris Ganjam, and Xu Chu. SEMA–JOIN: joining semantically-related tables using big table corpora. *Proceedings of the VLDB Endowment*, 8(12):1358–1369, August 2015. CODEN ???? ISSN 2150-8097.

Krishnan:2015:SVC

[1338] Sanjay Krishnan, Jiannan Wang, Michael J. Franklin, Ken Goldberg, and Tim Kraska. Stale view cleaning: getting fresh answers from stale materialized views. *Proceedings of the VLDB Endowment*, 8(12):1370–1381, August 2015. CODEN ???? ISSN 2150-8097.

Nagarkar:2015:CSH

[1339] Parth Nagarkar, K. Selçuk Candan, and Aneesha Bhat. Compressed spatial hierarchical bitmap (cSHB) indexes for efficiently processing spatial range query workloads. *Proceedings of the VLDB Endowment*, 8(12):1382–1393, August 2015. CODEN ???? ISSN 2150-8097.

Deutch:2015:SPD

[1340] Daniel Deutch, Amir Gilad, and Yuval Moskovitch. Selective provenance for datalog programs using top-k queries. *Proceedings of the VLDB Endowment*, 8(12):1394–1405, August 2015. CODEN ???? ISSN 2150-8097.

Park:2015:PPS

[1341] Yoonjae Park, Jun-Ki Min, and Kyuseok Shim. Processing of probabilistic skyline queries using MapReduce. *Proceedings of the VLDB Endowment*, 8(12):1406–1417, August 2015. CODEN ???? ISSN 2150-8097.

Zhang:2015:BVS

[1342] Xiaofei Zhang, Hong Cheng, and Lei Chen. Bonding vertex sets over distributed graph: a betweenness aware approach. *Proceedings of the VLDB Endowment*, 8(12):1418–1429, August 2015. CODEN ???? ISSN 2150-8097.

Amsterdamer:2015:NLI

[1343] Yael Amsterdamer, Anna Kukliansky, and Tova Milo. A natural language interface for querying general and individual knowledge. *Proceedings of the VLDB Endowment*, 8(12):1430–1441, August 2015. CODEN ???? ISSN 2150-8097.

Psaroudakis:2015:SCM

[1344] Iraklis Psaroudakis, Tobias Scheuer, Norman May, Abdelkader Sellami, and Anastasia Ailamaki. Scaling up concurrent main-memory column-store scans: towards adaptive NUMA-aware data and task placement. *Proceedings of the VLDB Endowment*, 8(12):1442–1453, August 2015. CODEN ???? ISSN 2150-8097.

Oh:2015:SOP

[1345] Gihwan Oh, Sangchul Kim, Sang-Won Lee, and Bongki Moon. SQLite optimization with phase change memory for mobile applications. *Proceedings of the VLDB Endowment*, 8(12):1454–1465, August 2015. CODEN ???? ISSN 2150-8097.

Crotty:2015:ACU

[1346] Andrew Crotty, Alex Galakatos, Kayhan Dursun, Tim Kraska, Carsten Binnig, Ugur Cetintemel, and Stan Zdonik. An architecture for compiling UDF-centric workflows. *Proceedings of the VLDB Endowment*, 8(12):1466–1477, August 2015. CODEN ???? ISSN 2150-8097.

Margo:2015:SDG

[1347] Daniel Margo and Margo Seltzer. A scalable distributed graph partitioner. *Proceedings of the VLDB Endowment*, 8(12):1478–1489, August 2015. CODEN ???? ISSN 2150-8097.

Sharov:2015:TMY

[1348] Artyom Sharov, Alexander Shraer, Arif Merchant, and Murray Stokely. Take me to your leader!: online optimization of distributed storage configurations. *Proceedings of the VLDB Endowment*, 8(12):1490–1501, August 2015. CODEN ???? ISSN 2150-8097.

Fan:2015:ARG

[1349] Wenfei Fan, Xin Wang, Yinghui Wu, and Jingbo Xu. Association rules with graph patterns. *Proceedings of the VLDB Endowment*, 8(12):1502–1513, August 2015. CODEN ???? ISSN 2150-8097.

Kimmett:2015:FJM

[1350] Ben Kimmett, Venkatesh Srinivasan, and Alex Thomo. Fuzzy joins in MapReduce: an experimental study. *Proceedings of the VLDB Endowment*, 8(12):1514–1517, August 2015. CODEN ???? ISSN 2150-8097.

Cho:2015:PEP

[1351] Minsik Cho, Daniel Brand, Rajesh Bordawekar, Ulrich Finkler, Vincent Kulandaisamy, and Ruchir Puri. PARADIS: an efficient parallel algorithm for in-place radix sort. *Proceedings of the VLDB Endowment*, 8(12):1518–1529, August 2015. CODEN ???? ISSN 2150-8097.

Vengerov:2015:JSE

[1352] David Vengerov, Andre Cavalheiro Menck, Mohamed Zait, and Sunil P. Chakkappen. Join size estimation subject to filter conditions. *Proceedings of the VLDB Endowment*, 8(12):1530–1541, August 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:AFT

[1353] Jingjing Wang, Magdalena Balazinska, and Daniel Halperin. Asynchronous and fault-tolerant recursive datalog evaluation in shared-nothing engines. *Proceedings of the VLDB Endowment*, 8(12):1542–1553, August 2015. CODEN ???? ISSN 2150-8097.

Mouratidis:2015:MRQ

[1354] Kyriakos Mouratidis, Jilian Zhang, and HweeHwa Pang. Maximum rank query. *Proceedings of the VLDB Endowment*, 8(12):1554–1565, August 2015. CODEN ???? ISSN 2150-8097.

Katsarou:2015:PSI

[1355] Foteini Katsarou, Nikos Ntarmos, and Peter Triantafillou. Performance and scalability of indexed subgraph query processing methods. *Proceedings of the VLDB Endowment*, 8(12):1566–1577, August 2015. CODEN ???? ISSN 2150-8097.

Yang:2015:LDA

[1356] Ying Yang, Niccolò Meneghetti, Ronny Fehling, Zhen Hua Liu, and Oliver Kennedy. Lenses: an on-demand approach to ETL. *Proceedings of the VLDB Endowment*, 8(12):1578–1589, August 2015. CODEN ???? ISSN 2150-8097.

Fan:2015:KG

[1357] Wenfei Fan, Zhe Fan, Chao Tian, and Xin Luna Dong. Keys for graphs. *Proceedings of the VLDB Endowment*, 8 (12):1590–1601, August 2015. CODEN ???? ISSN 2150-8097.

Eldawy:2015:SPT

[1358] Ahmed Eldawy, Louai Alarabi, and Mohamed F. Mokbel. Spatial partitioning techniques in SpatialHadoop. *Proceedings of the VLDB Endowment*, 8 (12):1602–1605, August 2015. CODEN ???? ISSN 2150-8097.

Manabe:2015:ELH

[1359] Tomohiro Manabe and Keishi Tajima. Extracting logical hierarchical structure of HTML documents based on headings. *Proceedings of the VLDB Endowment*, 8(12):1606–1617, August 2015. CODEN ???? ISSN 2150-8097.

Naidan:2015:PSM

[1360] Bilegsaikhan Naidan, Leonid Boytsov, and Eric Nyberg. Permutation search methods are efficient, yet faster search is possible. *Proceedings of the VLDB Endowment*, 8(12):1618–1629, August 2015. CODEN ???? ISSN 2150-8097.

Mukherjee:2015:DAO

[1361] Niloy Mukherjee, Shasank Chavan, Maria Colgan, Dinesh Das, Mike

Gleeson, Sanket Hase, Allison Holloway, Hui Jin, Jesse Kamp, Kartik Kulkarni, Tirthankar Lahiri, Juan Loaiza, Neil Macnaughton, Vineet Marwah, Atrayee Mullick, Andy Witkowski, Jiaqi Yan, and Mohamed Zait. Distributed architecture of Oracle database in-memory. *Proceedings of the VLDB Endowment*, 8(12):1630–1641, August 2015. CODEN ???? ISSN 2150-8097.

Haas:2015:AMC

[1362] Daniel Haas, Jason Ansel, Lydia Gu, and Adam Marcus. Argonaut: macrotask crowdsourcing for complex data processing. *Proceedings of the VLDB Endowment*, 8(12):1642–1653, August 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:BRL

[1363] Guozhang Wang, Joel Koshy, Sriram Subramanian, Kartik Paramasivam, Mammad Zadeh, Neha Narkhede, Jun Rao, Jay Kreps, and Joe Stein. Building a replicated logging system with Apache Kafka. *Proceedings of the VLDB Endowment*, 8(12):1654–1655, August 2015. CODEN ???? ISSN 2150-8097.

Loro:2015:ISH

[1364] Alessandra Loro, Anja Gruenheid, Donald Kossmann, Damien Profeta, and Philippe Beaudequin. Indexing and selecting hierarchical business logic. *Proceedings of the VLDB Endowment*, 8(12):1656–1667, August 2015. CODEN ???? ISSN 2150-8097.

Shukla:2015:SAI

[1365] Dharma Shukla, Shireesh Thota, Karthik Raman, Madhan Gajendran, Ankur Shah, Sergii Ziuzin, Krishnan Sundaram, Miguel Gonzalez Guajardo, Anna Wawrzyniak, Samer Boshra, Renato Ferreira, Mohamed Nassar, Michael Koltachev, Ji Huang, Sudipta Sengupta, Justin Levandoski, and David Lomet. Schema-agnostic indexing with Azure DocumentDB. *Proceedings of the VLDB Endowment*, 8(12): 1668–1679, August 2015. CODEN ???? ISSN 2150-8097.

Boutin:2015:JRI

[1366] Eric Boutin, Paul Brett, Xiaoyu Chen, Jaliya Ekanayake, Tao Guan, Anna Korsun, Zhicheng Yin, Nan Zhang, and Jingren Zhou. JetScope: reliable and interactive analytics at cloud scale. *Proceedings of the VLDB Endowment*, 8(12):1680–1691, August 2015. CODEN ???? ISSN 2150-8097.

Hu:2015:DPT

[1367] Xueyang Hu, Mingxuan Yuan, Jianguo Yao, Yu Deng, Lei Chen, Qiang Yang, Haibing Guan, and Jia Zeng. Differential privacy in telco big data platform. *Proceedings of the VLDB Endowment*, 8(12):1692–1703, August 2015. CODEN ???? ISSN 2150-8097.

El-Helw:2015:OCT

[1368] Amr El-Helw, Venkatesh Raghavan, Mohamed A. Soliman, George Caragea, Zhongxian Gu, and Michalis Petropoulos. Optimization of common table expressions in MPP database systems. *Proceedings of the VLDB Endowment*, 8(12):1704–1715, August 2015. CODEN ???? ISSN 2150-8097.

Goel:2015:TSR

[1369] Anil K. Goel, Jeffrey Pound, Nathan Auch, Peter Bumbulis, Scott MacLean, Franz Färber, Francis Gropengiesser, Christian Mathis, Thomas Bodner, and Wolfgang Lehner. Towards scalable real-time analytics: an architecture for scale-out of OLxP workloads. *Proceedings of the VLDB Endowment*, 8(12): 1716–1727, August 2015. CODEN ???? ISSN 2150-8097.

Dasu:2015:FMF

[1370] Tamraparni Dasu, Vladislav Shkapenyuk, Divesh Srivastava, and Deborah F. Swayne. FIT to monitor feed quality. *Proceedings of the VLDB Endowment*, 8(12):1728–1739, August 2015. CODEN ???? ISSN 2150-8097.

Larson:2015:RTA

[1371] Per-Åke Larson, Adrian Birka, Eric N. Hanson, Weiyun Huang, Michal Nowakiewicz, and Vassilis Papadimos. Real-time analytical processing with SQL server. *Proceedings of the VLDB Endowment*, 8(12):1740–1751, August 2015. CODEN ???? ISSN 2150-8097.

Wu:2015:EEO

[1372] You Wu, Boulos Harb, Jun Yang, and Cong Yu. Efficient evaluation of object-centric exploration queries for visualization. *Proceedings of the VLDB Endowment*, 8(12):1752–1763, August 2015. CODEN ???? ISSN 2150-8097.

Qiao:2015:GUD

[1373] Lin Qiao, Yinan Li, Sahil Takiar, Ziyang Liu, Narasimha Veeramreddy, Min Tu, Ying Dai, Issac Buenrostro, Kapil Surlaker, Shirshanka Das, and Chavdar Botev. Gobblin: unifying data ingestion for Hadoop. *Proceedings of the VLDB Endowment*, 8(12):1764–1769, August 2015. CODEN ???? ISSN 2150-8097.

Das:2015:QOO

[1374] Dinesh Das, Jiaqi Yan, Mohamed Zait, Satyanarayana R. Valluri, Nirav Vyas, Ramarajan Krishnamachari, Prashant Gaharwar, Jesse Kamp, and Niloy Mukherjee. Query optimization in Oracle 12c database in-memory. *Proceedings of the VLDB Endowment*, 8(12): 1770–1781, August 2015. CODEN ???? ISSN 2150-8097.

Green:2015:LPL

[1375] Todd J. Green, Dan Olteanu, and Geoffrey Washburn. Live programming in the LogicBlox system: a MetaLogiQL approach. *Proceedings of the VLDB Endowment*, 8(12):1782–1791, August 2015. CODEN ???? ISSN 2150-8097.

Akidau:2015:DMP

[1376] Tyler Akidau, Robert Bradshaw, Craig Chambers, Slava Chernyak, Rafael J. Fernández-Moctezuma, Reuven Lax, Sam McVeety, Daniel Mills, Frances Perry, Eric Schmidt, and Sam Whittle. The dataflow model: a practical approach to balancing correctness, latency, and cost in massive-scale, unbounded, out-of-order data processing. *Proceedings of the VLDB Endowment*, 8(12):1792–1803, August 2015. CODEN ???? ISSN 2150-8097.

Ching:2015:OTE

[1377] Avery Ching, Sergey Edunov, Maja Kabiljo, Dionysios Logothetis, and Sambavi Muthukrishnan. One trillion edges: graph processing at Facebook-scale. *Proceedings of the VLDB Endowment*, 8(12):1804–1815, August 2015. CODEN ???? ISSN 2150-8097.

Pelkonen:2015:GFS

[1378] Tuomas Pelkonen, Scott Franklin, Justin Teller, Paul Cavallaro, Qi Huang, Justin Meza, and Kaushik Veeraraghavan. Gorilla: a fast, scalable, in-memory time series database. *Proceedings of the VLDB Endowment*, 8(12): 1816–1827, August 2015. CODEN ???? ISSN 2150-8097.

Potharaju:2015:CLC

[1379] Rahul Potharaju, Joseph Chan, Luhui Hu, Cristina Nita-Rotaru, Mingshi Wang, Liyuan Zhang, and Navendu Jain. ConfSeer: leveraging customer support knowledge bases for automated misconfiguration detection. *Proceedings of the VLDB Endowment*, 8(12): 1828–1839, August 2015. CODEN ???? ISSN 2150-8097.

Armbrust:2015:SSR

[1380] Michael Armbrust, Tathagata Das, Aaron Davidson, Ali Ghodsi, Andrew Or, Josh Rosen, Ion Stoica, Patrick Wendell, Reynold Xin, and Matei Zaharia. Scaling spark in the real world: performance and usability. *Proceedings of the VLDB Endowment*, 8(12):1840–1843, August 2015. CODEN ???? ISSN 2150-8097.

Sahli:2015:SLS

[1381] Majed Sahli, Essam Mansour, and Panos Kalnis. StarDB: a large-scale DBMS for strings. *Proceedings of the VLDB Endowment*, 8(12):1844–1847, August 2015. CODEN ???? ISSN 2150-8097.

Harbi:2015:ESQ

[1382] Razen Harbi, Ibrahim Abdelaziz, Panos Kalnis, and Nikos Mamoulis. Evaluating SPARQL queries on massive RDF datasets. *Proceedings of the VLDB Endowment*, 8(12):1848–1851, August 2015. CODEN ???? ISSN 2150-8097.

Kou:2015:TBR

[1383] Ngai Meng Kou, Leong Hou U., Nikos Mamoulis, Yuhong Li, Ye Li, and Zhiguo Gong. A topic-based reviewer assignment system. *Proceedings of the VLDB Endowment*, 8(12):1852–1855, August 2015. CODEN ???? ISSN 2150-8097.

Liroz-Gistau:2015:FHE

[1384] Miguel Liroz-Gistau, Reza Akbarinia, and Patrick Valduriez. FP–Hadoop: efficient execution of parallel jobs over skewed data. *Proceedings of the VLDB Endowment*, 8(12):1856–1859, August 2015. CODEN ???? ISSN 2150-8097.

Papenbrock:2015:DPM

[1385] Thorsten Papenbrock, Tanja Bergmann, Moritz Finke, Jakob Zwiener, and Felix Naumann. Data profiling with Metanome. *Proceedings of the VLDB Endowment*, 8(12):1860–1863, August 2015. CODEN ???? ISSN 2150-8097.

Kumar:2015:DSO

[1386] Arun Kumar, Mona Jalal, Boqun Yan, Jeffrey Naughton, and Jignesh M. Patel. Demonstration of Santoku: optimizing machine learning over normalized data. *Proceedings of the VLDB Endowment*, 8(12):1864–1867, August 2015. CODEN ???? ISSN 2150-8097.

Seah:2015:PCP

[1387] Boon Siew Seah, Sourav S. Bhowmick, and Aixin Sun. PRISM: concept-preserving summarization of top-k social image search results. *Proceedings*

of the VLDB Endowment, 8(12):1868–1871, August 2015. CODEN ???? ISSN 2150-8097.

Muller:2015:PST

[1388] Tobias Müller and Torsten Grust. Provenance for SQL through abstract interpretation: value-less, but worthwhile. *Proceedings of the VLDB Endowment*, 8(12):1872–1875, August 2015. CODEN ???? ISSN 2150-8097.

He:2015:SSQ

[1389] Zhian He, Wai Kit Wong, Ben Kao, David Wai Lok Cheung, Rongbin Li, Siu Ming Yiu, and Eric Lo. SDB: a secure query processing system with data interoperability. *Proceedings of the VLDB Endowment*, 8(12):1876–1879, August 2015. CODEN ???? ISSN 2150-8097.

Abdelaziz:2015:SVC

[1390] Ibrahim Abdelaziz, Razen Harbi, Semih Salihoglu, Panos Kalnis, and Nikos Mamoulis. SPARTex: a vertex-centric framework for RDF data analytics. *Proceedings of the VLDB Endowment*, 8(12):1880–1883, August 2015. CODEN ???? ISSN 2150-8097.

Chen:2015:IDG

[1391] Lu Chen, Yunjun Gao, Zhihao Xing, Christian S. Jensen, and Gang Chen. I2RS: a distributed geo-textual image retrieval and recommendation system. *Proceedings of the VLDB Endowment*, 8(12):1884–1887, August 2015. CODEN ???? ISSN 2150-8097.

Bursztyn:2015:RBQ

[1392] Damian Bursztyn, François Goasdoué, and Ioana Manolescu. Reformulation-based query answering in RDF: alternatives and performance. *Proceedings of the VLDB Endowment*, 8(12):1888–1891, August 2015. CODEN ???? ISSN 2150-8097.

Bux:2015:SSS

[1393] Marc Bux, Jörgen Brandt, Carsten Lipka, Kamal Hakimzadeh, Jim Dowling, and Ulf Leser. SAASFEE: scalable scientific workflow execution engine. *Proceedings of the VLDB Endowment*, 8(12):1892–1895, August 2015. CODEN ???? ISSN 2150-8097.

Eldawy:2015:DHE

[1394] Ahmed Eldawy, Mohamed F. Mokbel, and Christopher Jonathan. A demonstration of HadoopViz: an extensible MapReduce system for visualizing big spatial data. *Proceedings of the VLDB Endowment*, 8(12):1896–1899, August 2015. CODEN ???? ISSN 2150-8097.

Bergman:2015:QQO

[1395] Moria Bergman, Tova Milo, Slava Novgorodov, and Wang-Chiew Tan. QOCO: a query oriented data cleaning system with oracles. *Proceedings of the VLDB Endowment*, 8(12):1900–1903, August 2015. CODEN ???? ISSN 2150-8097.

Ying:2015:TFS

[1396] Shanshan Ying, Flip Korn, Barna Saha, and Divesh Srivastava. TreeScope: finding structural anomalies in semi-structured data. *Proceedings of the VLDB Endowment*, 8(12):1904–1907, August 2015. CODEN ???? ISSN 2150-8097.

Elmore:2015:DBP

[1397] A. Elmore, J. Duggan, M. Stonebraker, M. Balazinska, U. Cetintemel, V. Gadepally, J. Heer, B. Howe,

J. Kepner, T. Kraska, S. Madden, D. Maier, T. Mattson, S. Papadopoulos, J. Parkhurst, N. Tatbul, M. Vartak, and S. Zdonik. A demonstration of the BigDAWG polystore system. *Proceedings of the VLDB Endowment*, 8(12): 1908–1911, August 2015. CODEN ???? ISSN 2150-8097.

Zoumpatianos:2015:RID

[1398] Kostas Zoumpatianos, Stratos Idreos, and Themis Palpanas. RINSE: interactive data series exploration with ADS+. *Proceedings of the VLDB Endowment*, 8(12):1912–1915, August 2015. CODEN ???? ISSN 2150-8097.

Bhardwaj:2015:CDA

[1399] Anant Bhardwaj, Amol Deshpande, Aaron J. Elmore, David Karger, Sam Madden, Aditya Parameswaran, Harihar Subramanyam, Eugene Wu, and Rebecca Zhang. Collaborative data analytics with DataHub. *Proceedings of the VLDB Endowment*, 8(12):1916–1919, August 2015. CODEN ???? ISSN 2150-8097.

Shin:2015:MDD

[1400] Jaeho Shin, Christopher Ré, and Michael Cafarella. Mindtagger: a demonstration of data labeling in knowledge base construction. *Proceedings of the VLDB Endowment*, 8(12): 1920–1923, August 2015. CODEN ???? ISSN 2150-8097.

Koutra:2015:PIL

[1401] Danai Koutra, Di Jin, Yuanchi Ning, and Christos Faloutsos. Perseus: an interactive large-scale graph mining and visualization tool. *Proceedings of the VLDB Endowment*, 8(12):1924–1927, August 2015. CODEN ???? ISSN 2150-8097.

Joglekar:2015:SDN

[1402] Manas Joglekar, Hector Garcia-Molina, and Aditya Parameswaran. Smart drill-down: a new data exploration operator. *Proceedings of the VLDB Endowment*, 8(12):1928–1931, August 2015. CODEN ???? ISSN 2150-8097.

Dyreson:2015:VED

[1403] Curtis E. Dyreson, Sourav S. Bhowmick, and Ryan Grapp. Virtual eXist-db: liberating hierarchical queries from the shackles of access path dependence. *Proceedings of the VLDB Endowment*, 8(12):1932–1935, August 2015. CODEN ???? ISSN 2150-8097.

Cortez:2015:ADS

[1404] Eli Cortez, Philip A. Bernstein, Yeye He, and Lev Novik. Annotating database schemas to help enterprise search. *Proceedings of the VLDB Endowment*, 8(12):1936–1939, August 2015. CODEN ???? ISSN 2150-8097.

Jayaram:2015:VAS

[1405] Nandish Jayaram, Sidharth Goyal, and Chengkai Li. VIIQ: auto-suggestion enabled visual interface for interactive graph query formulation. *Proceedings of the VLDB Endowment*, 8(12):1940–1943, August 2015. CODEN ???? ISSN 2150-8097.

Liu:2015:FSS

[1406] Qingyuan Liu, Eduard C. Dragut, Arjun Mukherjee, and Weiyi Meng. FLORIN: a system to support (near) real-time applications on user generated content on daily news. *Proceedings*

of the VLDB Endowment, 8(12):1944–1947, August 2015. CODEN ???? ISSN 2150-8097.

Li:2015:VVI

[1407] Yunyao Li, Elmer Kim, Marc A. Touchette, Ramiya Venkatachalam, and Hao Wang. VINERy: a visual IDE for information extraction. *Proceedings of the VLDB Endowment*, 8(12):1948–1951, August 2015. CODEN ???? ISSN 2150-8097.

Chu:2015:KRD

[1408] Xu Chu, John Morcos, Ihab F. Ilyas, Mourad Ouzzani, Paolo Papotti, Nan Tang, and Yin Ye. KATARA: reliable data cleaning with knowledge bases and crowdsourcing. *Proceedings of the VLDB Endowment*, 8(12):1952–1955, August 2015. CODEN ???? ISSN 2150-8097.

Alvanaki:2015:GNB

[1409] Foteini Alvanaki, Romulo Goncalves, Milena Ivanova, Martin Kersten, and Kostis Kyzirakos. GIS navigation boosted by column stores. *Proceedings of the VLDB Endowment*, 8(12):1956–1959, August 2015. CODEN ???? ISSN 2150-8097.

Arocena:2015:GCY

[1410] Patricia C. Arocena, Radu Ciucanu, Boris Glavic, and Renée J. Miller. Gain control over your integration evaluations. *Proceedings of the VLDB Endowment*, 8(12):1960–1963, August 2015. CODEN ???? ISSN 2150-8097.

Diao:2015:AAU

[1411] Yanlei Diao, Kyriaki Dimitriadou, Zhan Li, Wenzhao Liu, Olga Papaemmanouil, Kemi Peng, and Liping Peng. AIDE: an automatic user navigation system for interactive data exploration. *Proceedings of the VLDB Endowment*, 8(12):1964–1967, August 2015. CODEN ???? ISSN 2150-8097.

Aly:2015:DAA

[1412] Ahmed M. Aly, Ahmed S. Abdelhamid, Ahmed R. Mahmood, Walid G. Aref, Mohamed S. Hassan, Hazem Elmeleegy, and Mourad Ouzzani. A demonstration of AQWA: adaptive query-workload-aware partitioning of big spatial data. *Proceedings of the VLDB Endowment*, 8(12):1968–1971, August 2015. CODEN ???? ISSN 2150-8097.

Dittrich:2015:JID

[1413] Jens Dittrich and Patrick Bender. Janiform intra-document analytics for reproducible research. *Proceedings of the VLDB Endowment*, 8(12):1972–1975, August 2015. CODEN ???? ISSN 2150-8097.

Schubert:2015:FCU

[1414] Erich Schubert, Alexander Koos, Tobias Emrich, Andreas Züfle, Klaus Arthur Schmid, and Arthur Zimek. A framework for clustering uncertain data. *Proceedings of the VLDB Endowment*, 8(12):1976–1979, August 2015. CODEN ???? ISSN 2150-8097.

Bidoit:2015:EWA

[1415] Nicole Bidoit, Melanie Herschel, and Katerina Tzompanaki. EFQ: why-not answer polynomials in action. *Proceedings of the VLDB Endowment*, 8(12):1980–1983, August 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:EDD

[1416] Xiaolan Wang, Mary Feng, Yue Wang, Xin Luna Dong, and Alexandra Meliou.

Error diagnosis and data profiling with DataXRay. *Proceedings of the VLDB Endowment*, 8(12):1984–1987, August 2015. CODEN ???? ISSN 2150-8097.

Pham:2015:SRD

[1417] Quan Pham, Severin Thaler, Tanu Malik, Ian Foster, and Boris Glavic. Sharing and reproducing database applications. *Proceedings of the VLDB Endowment*, 8(12):1988–1991, August 2015. CODEN ???? ISSN 2150-8097.

Wylot:2015:DTT

[1418] Marcin Wylot, Philippe Cudré-Mauroux, and Paul Groth. A demonstration of TripleProv: tracking and querying provenance over Web data. *Proceedings of the VLDB Endowment*, 8(12):1992–1995, August 2015. CODEN ???? ISSN 2150-8097.

Ortona:2015:WJW

[1419] Stefano Ortona, Giorgio Orsi, Marcello Buoncristiano, and Tim Furche. WADaR: joint wrapper and data repair. *Proceedings of the VLDB Endowment*, 8(12):1996–1999, August 2015. CODEN ???? ISSN 2150-8097.

Bendre:2015:DUD

[1420] Mangesh Bendre, Bofan Sun, Ding Zhang, Xinyan Zhou, Kevin Chen-Chuan Chang, and Aditya Parameswaran. DataSpread: unifying databases and spreadsheets. *Proceedings of the VLDB Endowment*, 8(12):2000–2003, August 2015. CODEN ???? ISSN 2150-8097.

Haas:2015:WNS

[1421] Daniel Haas, Sanjay Krishnan, Jiannan Wang, Michael J. Franklin, and Eugene Wu. Wisteria: nurturing scalable data cleaning infrastructure. *Proceedings of the VLDB Endowment*, 8(12): 2004–2007, August 2015. CODEN ???? ISSN 2150-8097.

S:2015:CDA

[1422] Ashoke S. and Jayant R. Haritsa. CODD: a dataless approach to big data testing. *Proceedings of the VLDB Endowment*, 8(12):2008–2011, August 2015. CODEN ???? ISSN 2150-8097.

Cebiric:2015:QOS

[1423] Sejla Cebirić, François Goasdoué, and Ioana Manolescu. Query-oriented summarization of RDF graphs. *Proceedings of the VLDB Endowment*, 8(12):2012–2015, August 2015. CODEN ???? ISSN 2150-8097.

Chodpathumwan:2015:UDT

[1424] Yodsawalai Chodpathumwan, Amirhossein Aleyasen, Arash Termehchy, and Yizhou Sun. Universal-DB: towards representation independent graph analytics. *Proceedings of the VLDB Endowment*, 8(12):2016–2019, August 2015. CODEN ???? ISSN 2150-8097.

Mahmood:2015:TDS

[1425] Ahmed R. Mahmood, Ahmed M. Aly, Thamir Qadah, El Kindi Rezig, Anas Daghistani, Amgad Madkour, Ahmed S. Abdelhamid, Mohamed S. Hassan, Walid G. Aref, and Saleh Basalamah. Tornado: a distributed spatio-textual stream processing system. *Proceedings of the VLDB Endowment*, 8(12):2020–2023, August 2015. CODEN ???? ISSN 2150-8097.

Crotty:2015:VIA

[1426] Andrew Crotty, Alex Galakatos, Emanuel Zgraggen, Carsten Binnig, and Tim Kraska. Vizdom: interactive analytics through pen and touch. *Proceedings of the VLDB Endowment*, 8 (12):2024–2027, August 2015. CODEN ???? ISSN 2150-8097.

Consens:2015:SCE

[1427] Mariano P. Consens, Valeria Fionda, Shahan Khatchadourian, and Giuseppe Pirrò. S+EPPs: construct and explore bisimulation summaries, plus optimize navigational queries; all on existing SPARQL systems. *Proceedings of the VLDB Endowment*, 8(12):2028–2031, August 2015. CODEN ???? ISSN 2150-8097.

Xirogiannopoulos:2015:GEI

[1428] Konstantinos Xirogiannopoulos, Udayan Khurana, and Amol Deshpande. GraphGen: exploring interesting graphs in relational data. *Proceedings of the VLDB Endowment*, 8(12):2032–2035, August 2015. CODEN ???? ISSN 2150-8097.

Yoon:2015:DPF

[1429] Dong Young Yoon, Barzan Mozafari, and Douglas P. Brown. DBSeer: painfree database administration through workload intelligence. *Proceedings of the VLDB Endowment*, 8(12):2036–2039, August 2015. CODEN ???? ISSN 2150-8097.

Kejariwal:2015:RTA

[1430] Arun Kejariwal, Sanjeev Kulkarni, and Karthik Ramasamy. Real time analytics: algorithms and systems. *Proceedings of the VLDB Endowment*, 8(12): 2040–2041, August 2015. CODEN ???? ISSN 2150-8097.

Khan:2015:UGM

[1431] Arijit Khan and Lei Chen. On uncertain graphs modeling and queries. *Proceedings of the VLDB Endowment*, 8 (12):2042–2043, August 2015. CODEN ???? ISSN 2150-8097.

Dong:2015:TMI

[1432] Xin Luna Dong and Wang-Chiew Tan. A time machine for information: looking back to look forward. *Proceedings of the VLDB Endowment*, 8(12):2044–2045, August 2015. CODEN ???? ISSN 2150-8097.

Das:2015:SAS

[1433] Mahashweta Das and Gautam Das. Structured analytics in social media. *Proceedings of the VLDB Endowment*, 8(12):2046–2047, August 2015. CODEN ???? ISSN 2150-8097.

Gao:2015:TDC

[1434] Jing Gao, Qi Li, Bo Zhao, Wei Fan, and Jiawei Han. Truth discovery and crowdsourcing aggregation: a unified perspective. *Proceedings of the VLDB Endowment*, 8(12):2048–2049, August 2015. CODEN ???? ISSN 2150-8097.

Abadi:2015:SHS

[1435] Daniel Abadi, Shivnath Babu, Fatma Özcan, and Ippokratis Pandis. SQL-on-Hadoop systems: tutorial. *Proceedings of the VLDB Endowment*, 8(12):2050–2051, August 2015. CODEN ???? ISSN 2150-8097.

Loaiza:2015:EDH

[1436] Juan Loaiza. Engineering database hardware and software together. *Proceedings of the VLDB Endowment*, 8 (12):2052, August 2015. CODEN ???? ISSN 2150-8097.

Balazinska:2015:BDR

[1437] Magdalena Balazinska. Big data research: will industry solve all the problems? *Proceedings of the VLDB Endowment*, 8(12):2053–2056, August 2015. CODEN ???? ISSN 2150-8097.

Walter:2015:BPB

[1438] Todd Walter. Big plateaus of Big Data on the big island. *Proceedings of the VLDB Endowment*, 8(12):2057, August 2015. CODEN ???? ISSN 2150-8097.

Ailamaki:2015:DHB

[1439] Anastasia Ailamaki. Databases and hardware: the beginning and sequel of a beautiful friendship. *Proceedings of the VLDB Endowment*, 8(12):2058–2061, August 2015. CODEN ???? ISSN 2150-8097.

Aly:2015:AAQ

[1440] Ahmed M. Aly, Ahmed R. Mahmood, Mohamed S. Hassan, Walid G. Aref, Mourad Ouzzani, Hazem Elmeleegy, and Thamir Qadah. AQWA: adaptive query workload aware partitioning of big spatial data. *Proceedings of the VLDB Endowment*, 8(13):2062–2073, September 2015. CODEN ???? ISSN 2150-8097.

Khayyat:2015:LFS

[1441] Zuhair Khayyat, William Lucia, Meghna Singh, Mourad Ouzzani, Paolo Papotti, Jorge-Arnulfo Quiané-Ruiz, Nan Tang, and Panos Kalnis. Lightning fast and space efficient inequality joins. *Proceedings of the VLDB Endowment*, 8(13):2074–2085, September 2015. CODEN ???? ISSN 2150-8097. See erratum [1710].

Liu:2015:FPO

[1442] Jinfei Liu, Li Xiong, Jian Pei, Jun Luo, and Haoyu Zhang. Finding Pareto optimal groups: group-based skyline. *Proceedings of the VLDB Endowment*, 8 (13):2086–2097, September 2015. CODEN ???? ISSN 2150-8097.

Faulkner:2015:RQN

[1443] Taylor Kessler Faulkner, Will Brackenbury, and Ashwin Lall. k-regret queries with nonlinear utilities. *Proceedings of the VLDB Endowment*, 8(13):2098–2109, September 2015. CODEN ???? ISSN 2150-8097.

Shi:2015:CTM

[1444] Juwei Shi, Yunjie Qiu, Umar Farooq Minhas, Limei Jiao, Chen Wang, Berthold Reinwald, and Fatma Özcan. Clash of the titans: MapReduce vs. Spark for large scale data analytics. *Proceedings of the VLDB Endowment*, 8(13):2110–2121, September 2015. CODEN ???? ISSN 2150-8097.

Liu:2015:TMI

[1445] Yu Liu, Jiaheng Lu, Hua Yang, Xiaokui Xiao, and Zhewei Wei. Towards maximum independent sets on massive graphs. *Proceedings of the VLDB Endowment*, 8(13):2122–2133, September 2015. CODEN ???? ISSN 2150-8097.

Meehan:2015:SSM

[1446] John Meehan, Nesime Tatbul, Stan Zdonik, Cansu Aslantas, Ugur Cetintemel, Jiang Du, Tim Kraska, Samuel Madden, David Maier, Andrew Pavlo, Michael Stonebraker, Kristin Tufte, and Hao Wang. S-Store: streaming meets transaction processing. *Proceedings of the VLDB Endowment*, 8(13):

2134–2145, September 2015. CODEN ???? ISSN 2150-8097.

Levandoski:2015:MVR

[1447] Justin Levandoski, David Lomet, Sudipta Sengupta, Ryan Stutsman, and Rui Wang. Multi-version range concurrency control in Deuteronomy. *Proceedings of the VLDB Endowment*, 8(13):2146–2157, September 2015. CODEN ???? ISSN 2150-8097.

Li:2015:QEI

[1448] Hao Li, Chee-Yong Chan, and David Maier. Query from examples: an iterative, data-driven approach to query construction. *Proceedings of the VLDB Endowment*, 8(13):2158–2169, September 2015. CODEN ???? ISSN 2150-8097.

Galhotra:2015:TCR

[1449] Sainyam Galhotra, Amitabha Bagchi, Srikanta Bedathur, Maya Ramanath, and Vidit Jain. Tracking the conductance of rapidly evolving topic-subgraphs. *Proceedings of the VLDB Endowment*, 8(13):2170–2181, September 2015. CODEN ???? ISSN 2150-8097.

Vartak:2015:SED

[1450] Manasi Vartak, Sajjadur Rahman, Samuel Madden, Aditya Parameswaran, and Neoklis Polyzotis. SeeDB: efficient data-driven visualization recommendations to support visual analytics. *Proceedings of the VLDB Endowment*, 8 (13):2182–2193, September 2015. CODEN ???? ISSN 2150-8097.

Qiu:2015:DLS

[1451] Disheng Qiu, Luciano Barbosa, Xin Luna Dong, Yanyan Shen, and Divesh Srivastava. Dexter: large-scale discovery and extraction of product specifications on the web. *Proceedings of the VLDB Endowment*, 8(13):2194–2205, September 2015. CODEN ???? ISSN 2150-8097.

Huang:2015:QAL

[1452] Qiang Huang, Jianlin Feng, Yikai Zhang, Qiong Fang, and Wilfred Ng. Query-aware locality-sensitive hashing for approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 9(1):1–12, September 2015. CODEN ???? ISSN 2150-8097.

Khaouid:2015:KCD

[1453] Wissam Khaouid, Marina Barsky, Venkatesh Srinivasan, and Alex Thomo. K-core decomposition of large networks on a single PC. *Proceedings of the VLDB Endowment*, 9(1):13–23, September 2015. CODEN ???? ISSN 2150-8097.

Li:2015:WCP

[1454] Zhenguo Li, Yixiang Fang, Qin Liu, Jiefeng Cheng, Reynold Cheng, and John C. S. Lui. Walking in the cloud: parallel SimRank at scale. *Proceedings of the VLDB Endowment*, 9(1):24–35, September 2015. CODEN ???? ISSN 2150-8097.

Arocena:2015:MBE

[1455] Patricia C. Arocena, Boris Glavic, Giansalvatore Mecca, Renée J. Miller, Paolo Papotti, and Donatello Santoro. Messing up with BART: error generation for evaluating data-cleaning algorithms. *Proceedings of the VLDB Endowment*, 9(2):36–47, October 2015. CODEN ???? ISSN 2150-8097.

Hayashi:2015:FDB

[1456] Takanori Hayashi, Takuya Akiba, and Yuichi Yoshida. Fully dynamic betweenness centrality maintenance on massive networks. *Proceedings of the VLDB Endowment*, 9(2):48–59, October 2015. CODEN ???? ISSN 2150-8097.

Lu:2015:CCC

[1457] Wei Lu, Wei Chen, and Laks V. S. Lakshmanan. From competition to complementarity: comparative influence diffusion and maximization. *Proceedings of the VLDB Endowment*, 9(2):60–71, October 2015. CODEN ???? ISSN 2150-8097.

Kloudas:2015:POD

[1458] Konstantinos Kloudas, Margarida Mamede, Nuno Preguiça, and Rodrigo Rodrigues. Pixida: optimizing data parallel jobs in wide-area data analytics. *Proceedings of the VLDB Endowment*, 9(2):72–83, October 2015. CODEN ???? ISSN 2150-8097.

Wang:2015:SOS

[1459] Lu Wang, Robert Christensen, Feifei Li, and Ke Yi. Spatial online sampling and aggregation. *Proceedings of the VLDB Endowment*, 9(3):84–95, November 2015. CODEN ???? ISSN 2150-8097.

Richter:2015:SDA

[1460] Stefan Richter, Victor Alvarez, and Jens Dittrich. A seven-dimensional analysis of hashing methods and its implications on query processing. *Proceedings of the VLDB Endowment*, 9(3):96–107, November 2015. CODEN ???? ISSN 2150-8097.

Arocena:2015:IIM

[1461] Patricia C. Arocena, Boris Glavic, Radu Ciucanu, and Renée J. Miller. The iBench integration metadata generator. *Proceedings of the VLDB Endowment*, 9(3):108–119, November 2015. CODEN ???? ISSN 2150-8097.

Altwaijry:2015:QFI

[1462] Hotham Altwaijry, Sharad Mehrotra, and Dmitri V. Kalashnikov. QuERy: a framework for integrating entity resolution with query processing. *Proceedings of the VLDB Endowment*, 9(3):120–131, November 2015. CODEN ???? ISSN 2150-8097.

Lee:2015:POM

[1463] Taesung Lee, Jin woo Park, Sanghoon Lee, Seung-Won Hwang, Sameh Elnikety, and Yuxiong He. Processing and optimizing main memory spatial-keyword queries. *Proceedings of the VLDB Endowment*, 9(3):132–143, November 2015. CODEN ???? ISSN 2150-8097.

Park:2015:NSH

[1464] Yongjoo Park, Michael Cafarella, and Barzan Mozafari. Neighbor-sensitive hashing. *Proceedings of the VLDB Endowment*, 9(3):144–155, November 2015. CODEN ???? ISSN 2150-8097.

Huang:2015:CMB

[1465] Botong Huang, Nicholas W. D. Jarrett, Shivnath Babu, Sayan Mukherjee, and Jun Yang. Cümülön: matrix-based data analytics in the cloud with spot instances. *Proceedings of the VLDB Endowment*, 9(3):156–167, November 2015. CODEN ???? ISSN 2150-8097.

Kaul:2015:NLU

[1466] Manohar Kaul, Raymond Chi-Wing Wong, and Christian S. Jensen. New lower and upper bounds for shortest distance queries on terrains. *Proceedings of the VLDB Endowment*, 9(3): 168–179, November 2015. CODEN ???? ISSN 2150-8097.

Freire:2015:CRR

[1467] Cibele Freire, Wolfgang Gatterbauer, Neil Immerman, and Alexandra Meliou. The complexity of resilience and responsibility for self-join-free conjunctive queries. *Proceedings of the VLDB Endowment*, 9(3):180–191, November 2015. CODEN ???? ISSN 2150-8097.

Huang:2015:SAD

[1468] Hao Huang and Shiva Prasad Kasiviswanathan. Streaming anomaly detection using randomized matrix sketching. *Proceedings of the VLDB Endowment*, 9(3):192–203, November 2015. CODEN ???? ISSN 2150-8097.

Leis:2015:HGQ

[1469] Viktor Leis, Andrey Gubichev, Atanas Mirchev, Peter Boncz, Alfons Kemper, and Thomas Neumann. How good are query optimizers, really? *Proceedings of the VLDB Endowment*, 9(3):204–215, November 2015. CODEN ???? ISSN 2150-8097.

Interlandi:2015:TDP

[1470] Matteo Interlandi, Kshitij Shah, Sai Deep Tetali, Muhammad Ali Gulzar, Seunghyun Yoo, Miryung Kim, Todd Millstein, and Tyson Condie. Titian: data provenance support in Spark. *Proceedings of the VLDB Endowment*, 9(3):216–227, November 2015. CODEN ???? ISSN 2150-8097.

Rodiger:2015:HSQ

[1471] Wolf Rödiger, Tobias Mühlbauer, Alfons Kemper, and Thomas Neumann. High-speed query processing over high-speed networks. *Proceedings of the VLDB Endowment*, 9(4):228–239, December 2015. CODEN ???? ISSN 2150-8097.

Zong:2015:BQD

[1472] Bo Zong, Xusheng Xiao, Zhichun Li, Zhenyu Wu, Zhiyun Qian, Xifeng Yan, Ambuj K. Singh, and Guofei Jiang. Behavior query discovery in system-generated temporal graphs. *Proceedings of the VLDB Endowment*, 9(4): 240–251, December 2015. CODEN ???? ISSN 2150-8097.

Kocberber:2015:AMA

[1473] Onur Kocberber, Babak Falsafi, and Boris Grot. Asynchronous memory access chaining. *Proceedings of the VLDB Endowment*, 9(4):252–263, December 2015. CODEN ???? ISSN 2150-8097.

Haney:2015:DPA

[1474] Samuel Haney, Ashwin Machanavajjhala, and Bolin Ding. Design of policy-aware differentially private algorithms. *Proceedings of the VLDB Endowment*, 9(4):264–275, December 2015. CODEN ???? ISSN 2150-8097.

Huang:2015:ACC

[1475] Xin Huang, Laks V. S. Lakshmanan, Jeffrey Xu Yu, and Hong Cheng. Approximate closest community search in networks. *Proceedings of the VLDB Endowment*, 9(4):276–287, December 2015. CODEN ???? ISSN 2150-8097.

Andre:2015:CLE

[1476] Fabien André, Anne-Marie Kermarrec, and Nicolas Le Scouarnec. Cache locality is not enough: high-performance nearest neighbor search with product quantization fast scan. *Proceedings of the VLDB Endowment*, 9(4):288–299, December 2015. CODEN ???? ISSN 2150-8097.

Prokoshyna:2015:CQL

[1477] Nataliya Prokoshyna, Jarosław Szlichta, Fei Chiang, Renée J. Miller, and Divesh Srivastava. Combining quantitative and logical data cleaning. *Proceedings of the VLDB Endowment*, 9 (4):300–311, December 2015. CODEN ???? ISSN 2150-8097.

Papadakis:2015:SAV

[1478] George Papadakis, George Alexiou, George Papastefanatos, and Georgia Koutrika. Schema-agnostic vs schema-based configurations for blocking methods on homogeneous data. *Proceedings of the VLDB Endowment*, 9(4): 312–323, December 2015. CODEN ???? ISSN 2150-8097.

Epasto:2015:ENC

[1479] Alessandro Epasto, Silvio Lattanzi, Vahab Mirrokni, Ismail Oner Sebe, Ahmed Taei, and Sunita Verma. Ego-net community mining applied to friend suggestion. *Proceedings of the VLDB Endowment*, 9(4):324–335, December 2015. CODEN ???? ISSN 2150-8097.

Abedjan:2015:TRD

[1480] Ziawasch Abedjan, Cuneyt G. Akcora, Mourad Ouzzani, Paolo Papotti, and Michael Stonebraker. Temporal rules discovery for web data cleaning. *Proceedings of the VLDB Endowment*, 9 (4):336–347, December 2015. CODEN ???? ISSN 2150-8097.

Roy:2015:EQA

[1481] Sudeepa Roy, Laurel Orr, and Dan Suciu. Explaining query answers with explanation-ready databases. *Proceedings of the VLDB Endowment*, 9(4): 348–359, December 2015. CODEN ???? ISSN 2150-8097.

Deng:2015:EPB

[1482] Dong Deng, Guoliang Li, He Wen, and Jianhua Feng. An efficient partition based method for exact set similarity joins. *Proceedings of the VLDB Endowment*, 9(4):360–371, December 2015. CODEN ???? ISSN 2150-8097.

Haas:2015:CSC

[1483] Daniel Haas, Jiannan Wang, Eugene Wu, and Michael J. Franklin. CLAMShell: speeding up crowds for low-latency data labeling. *Proceedings of the VLDB Endowment*, 9(4):372–383, December 2015. CODEN ???? ISSN 2150-8097.

Firmani:2016:OER

[1484] Donatella Firmani, Barna Saha, and Divesh Srivastava. Online entity resolution using an oracle. *Proceedings of the VLDB Endowment*, 9(5):384–395, January 2016. CODEN ???? ISSN 2150-8097.

Calautti:2016:EEG

[1485] Marco Calautti, Sergio Greco, Cristian Molinaro, and Irina Trubitsyna. Exploiting equality generating dependencies in checking chase termination. *Proceedings of the VLDB Endowment*, 9

(5):396–407, January 2016. CODEN ???? ISSN 2150-8097.

Yang:2016:SBF

[1486] Tong Yang, Alex X. Liu, Muhammad Shahzad, Yuankun Zhong, Qiaobin Fu, Zi Li, Gaogang Xie, and Xiaoming Li. A shifting Bloom filter framework for set queries. *Proceedings of the VLDB Endowment*, 9(5):408–419, January 2016. CODEN ???? ISSN 2150-8097.

Yang:2016:HTM

[1487] Fan Yang, Jinfeng Li, and James Cheng. Husky: towards a more efficient and expressive distributed computing framework. *Proceedings of the VLDB Endowment*, 9(5):420–431, January 2016. CODEN ???? ISSN 2150-8097.

Li:2016:RDT

[1488] Zeyu Li, Hongzhi Wang, Wei Shao, Jianzhong Li, and Hong Gao. Repairing data through regular expressions. *Proceedings of the VLDB Endowment*, 9(5):432–443, January 2016. CODEN ???? ISSN 2150-8097.

Yan:2016:LLC

[1489] Cong Yan and Alvin Cheung. Leveraging lock contention to improve OLTP application performance. *Proceedings of the VLDB Endowment*, 9(5):444–455, January 2016. CODEN ???? ISSN 2150-8097.

Choudhury:2016:MBR

[1490] Farhana M. Choudhury, J. Shane Culpepper, Timos Sellis, and Xin Cao. Maximizing bichromatic reverse spatial and textual k nearest neighbor queries. *Proceedings of the VLDB Endowment*, 9(6):456–467, January 2016. CODEN ???? ISSN 2150-8097.

Subercaze:2016:IFM

[1491] Julien Subercaze, Christophe Gravier, Jules Chevalier, and Frederique Laforest. Inferray: fast in-memory RDF inference. *Proceedings of the VLDB Endowment*, 9(6):468–479, January 2016. CODEN ???? ISSN 2150-8097.

Makreshanski:2016:MES

[1492] Darko Makreshanski, Georgios Giannikis, Gustavo Alonso, and Donald Kossmann. MQJoin: efficient shared execution of main-memory joins. *Proceedings of the VLDB Endowment*, 9 (6):480–491, January 2016. CODEN ???? ISSN 2150-8097.

Abeywickrama:2016:NNR

[1493] Tenindra Abeywickrama, Muhammad Aamir Cheema, and David Taniar. k-nearest neighbors on road networks: a journey in experimentation and in-memory implementation. *Proceedings of the VLDB Endowment*, 9(6):492–503, January 2016. CODEN ???? ISSN 2150-8097.

Yuan:2016:BRF

[1494] Yuan Yuan, Kaibo Wang, Rubao Lee, Xiaoning Ding, Jing Xing, Spyros Blanas, and Xiaodong Zhang. BCC: reducing false aborts in optimistic concurrency control with low cost for in-memory databases. *Proceedings of the VLDB Endowment*, 9(6):504–515, January 2016. CODEN ???? ISSN 2150-8097.

Yuan:2016:EEG

[1495] Long Yuan, Lu Qin, Xuemin Lin, Lijun Chang, and Wenjie Zhang. I/O efficient ECC graph decomposition via graph reduction. *Proceedings of the VLDB Endowment*, 9(7):516–527, March 2016. CODEN ???? ISSN 2150-8097.

Binnig:2016:ESN

[1496] Carsten Binnig, Andrew Crotty, Alex Galakatos, Tim Kraska, and Erfan Zamanian. The end of slow networks: it's time for a redesign. *Proceedings of the VLDB Endowment*, 9(7):528–539, March 2016. CODEN ???? ISSN 2150-8097.

Huang:2016:LLE

[1497] Jiewen Huang and Daniel J. Abadi. Leopard: lightweight edge-oriented partitioning and replication for dynamic graphs. *Proceedings of the VLDB Endowment*, 9(7):540–551, March 2016. CODEN ???? ISSN 2150-8097.

Gribkoff:2016:SDP

[1498] Eric Gribkoff and Dan Suciu. SlimShot: in-database probabilistic inference for knowledge bases. *Proceedings of the VLDB Endowment*, 9(7):552–563, March 2016. CODEN ???? ISSN 2150-8097.

Yan:2016:GPQ

[1499] Da Yan, James Cheng, M. Tamer Özsu, Fan Yang, Yi Lu, John C. S. Lui, Qizhen Zhang, and Wilfred Ng. A general-purpose query-centric framework for querying big graphs. *Proceedings of the VLDB Endowment*, 9(7): 564–575, March 2016. CODEN ???? ISSN 2150-8097.

Brucato:2016:SPQ

[1500] Matteo Brucato, Juan Felipe Beltran, Azza Abouzied, and Alexandra Meliou. Scalable package queries in relational database systems. *Proceedings of the VLDB Endowment*, 9(7):576–587, March 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:STK

[1501] Xiang Wang, Ying Zhang, Wenjie Zhang, Xuemin Lin, and Zengfeng Huang. Skype: top-k spatial-keyword publish/subscribe over sliding window. *Proceedings of the VLDB Endowment*, 9(7):588–599, March 2016. CODEN ???? ISSN 2150-8097.

Asudeh:2016:DSW

[1502] Abolfazl Asudeh, Saravanan Thirumuruganathan, Nan Zhang, and Gautam Das. Discovering the skyline of web databases. *Proceedings of the VLDB Endowment*, 9(7):600–611, March 2016. CODEN ???? ISSN 2150-8097.

Zhang:2016:CTK

[1503] Xiaohang Zhang, Guoliang Li, and Jianhua Feng. Crowdsourced top-k algorithms: an experimental evaluation. *Proceedings of the VLDB Endowment*, 9(8):612–623, April 2016. CODEN ???? ISSN 2150-8097.

Maddox:2016:DRD

[1504] Michael Maddox, David Goehring, Aaron J. Elmore, Samuel Madden, Aditya Parameswaran, and Amol Deshpande. Decibel: the relational dataset branching system. *Proceedings of the VLDB Endowment*, 9(9):624–635, May 2016. CODEN ???? ISSN 2150-8097.

Mann:2016:EES

[1505] Willi Mann, Nikolaus Augsten, and Panagiotis Bouros. An empirical evaluation of set similarity join techniques. *Proceedings of the VLDB Endowment*, 9(9):636–647, May 2016. CODEN ???? ISSN 2150-8097.

Trummer:2016:MQO

[1506] Immanuel Trummer and Christoph Koch. Multiple query optimization on the D-Wave 2X adiabatic quantum computer. *Proceedings of the VLDB Endowment*, 9(9):648–659, May 2016. CODEN ???? ISSN 2150-8097.

Trummer:2016:PQO

[1507] Immanuel Trummer and Christoph Koch. Parallelizing query optimization on shared-nothing architectures. *Proceedings of the VLDB Endowment*, 9 (9):660–671, May 2016. CODEN ???? ISSN 2150-8097.

Kalavri:2016:SPA

[1508] Vasiliki Kalavri, Tiago Simas, and Dionysios Logothetis. The shortest path is not always a straight line: leveraging semi-metricity in graph analysis. *Proceedings of the VLDB Endowment*, 9(9):672–683, May 2016. CODEN ???? ISSN 2150-8097.

Papadakis:2016:CAA

[1509] George Papadakis, Jonathan Svirsky, Avigdor Gal, and Themis Palpanas. Comparative analysis of approximate blocking techniques for entity resolution. *Proceedings of the VLDB Endowment*, 9(9):684–695, May 2016. CODEN ???? ISSN 2150-8097.

Zhao:2016:EED

[1510] Yiran Zhao, Shen Li, Shaohan Hu, Hongwei Wang, Shuochao Yao, Huajie Shao, and Tarek Abdelzaher. An experimental evaluation of datacenter workloads on low-power embedded micro servers. *Proceedings of the VLDB Endowment*, 9(9):696–707, May 2016. CODEN ???? ISSN 2150-8097.

Song:2016:CTT

[1511] Shaoxu Song, Yue Cao, and Jianmin Wang. Cleaning timestamps with temporal constraints. *Proceedings of the VLDB Endowment*, 9(10):708–719, June 2016. CODEN ???? ISSN 2150-8097.

Tan:2016:TRS

[1512] Zilong Tan and Shivnath Babu. Tempo: robust and self-tuning resource management in multi-tenant parallel databases. *Proceedings of the VLDB Endowment*, 9(10):720–731, June 2016. CODEN ???? ISSN 2150-8097.

Daenen:2016:PEM

[1513] Jonny Daenen, Frank Neven, Tony Tan, and Stijn Vansummeren. Parallel evaluation of multi-semi-joins. *Proceedings of the VLDB Endowment*, 9 (10):732–743, June 2016. CODEN ???? ISSN 2150-8097.

Chen:2016:WCE

[1514] Jianfei Chen, Kaiwei Li, Jun Zhu, and Wenguang Chen. WarpLDA: a cache efficient O(1) algorithm for latent Dirichlet allocation. *Proceedings of the VLDB Endowment*, 9(10):744–755, June 2016. CODEN ???? ISSN 2150-8097.

Eich:2016:FPG

[1515] Marius Eich, Pit Fender, and Guido Moerkotte. Faster plan generation through consideration of functional dependencies and keys. *Proceedings of the VLDB Endowment*, 9(10):756–767, June 2016. CODEN ???? ISSN 2150-8097.

Schuhknecht:2016:RIR

[1516] Felix Martin Schuhknecht, Jens Dittrich, and Ankur Sharma. RUMA has it: rewired user-space memory access is possible! *Proceedings of the VLDB Endowment*, 9(10):768–779, June 2016. CODEN ???? ISSN 2150-8097.

Marcus:2016:WLB

[1517] Ryan Marcus and Olga Papaemmanouil. WiSeDB: a learning-based workload management advisor for cloud databases. *Proceedings of the VLDB Endowment*, 9(10):780–791, June 2016. CODEN ???? ISSN 2150-8097.

DeFrancisciMorales:2016:SSS

[1518] Gianmarco De Francisci Morales and Aristides Gionis. Streaming similarity self-join. *Proceedings of the VLDB Endowment*, 9(10):792–803, June 2016. CODEN ???? ISSN 2150-8097.

Schatzle:2016:SRQ

[1519] Alexander Schätzle, Martin Przyjaciel-Zablocki, Simon Skilevic, and Georg Lausen. S2RDF: RDF querying with SPARQL on spark. *Proceedings of the VLDB Endowment*, 9(10):804–815, June 2016. CODEN ???? ISSN 2150-8097.

Singh:2016:BSS

[1520] Rishabh Singh. BlinkFill: semi-supervised programming by example for syntactic string transformations. *Proceedings of the VLDB Endowment*, 9(10):816–827, June 2016. CODEN ???? ISSN 2150-8097.

Deng:2016:MEM

[1521] Dong Deng, Guoliang Li, He Wen, H. V. Jagadish, and Jianhua Feng. META: an efficient matching-based method for error-tolerant autocompletion. *Proceedings of the VLDB Endowment*, 9(10):828–839, June 2016. CODEN ???? ISSN 2150-8097.

Zheng:2016:SSS

[1522] Weiguo Zheng, Lei Zou, Wei Peng, Xifeng Yan, Shaoxu Song, and Dongyan Zhao. Semantic SPARQL similarity search over RDF knowledge graphs. *Proceedings of the VLDB Endowment*, 9(11):840–851, July 2016. CODEN ???? ISSN 2150-8097.

Dubey:2016:WHP

[1523] Ayush Dubey, Greg D. Hill, Robert Escriva, and Emin Gün Sirer. Weaver: a high-performance, transactional graph database based on refinable timestamps. *Proceedings of the VLDB Endowment*, 9(11):852–863, July 2016. CODEN ???? ISSN 2150-8097.

Chu:2016:DDD

[1524] Xu Chu, Ihab F. Ilyas, and Paraschos Koutris. Distributed data deduplication. *Proceedings of the VLDB Endowment*, 9(11):864–875, July 2016. CODEN ???? ISSN 2150-8097.

Arenas:2016:FAC

[1525] Marcelo Arenas, Francisco Maturana, Cristian Riveros, and Domagoj Vrgoc. A framework for annotating CSV-like data. *Proceedings of the VLDB Endowment*, 9(11):876–887, July 2016. CODEN ???? ISSN 2150-8097.

Asudeh:2016:QRS

[1526] Abolfazl Asudeh, Nan Zhang, and Gautam Das. Query reranking as a service. *Proceedings of the VLDB Endowment*, 9(11):888–899, July 2016. CODEN ???? ISSN 2150-8097.

Ma:2016:GSF

[1527] Hongbin Ma, Bin Shao, Yanghua Xiao, Liang Jeff Chen, and Haixun Wang. G-SQL: fast query processing via graph exploration. *Proceedings of the VLDB Endowment*, 9(12):900–911, August 2016. CODEN ???? ISSN 2150-8097.

Zhang:2016:MOD

[1528] Mingxing Zhang, Yongwei Wu, Kang Chen, Teng Ma, and Weimin Zheng. Measuring and optimizing distributed array programs. *Proceedings of the VLDB Endowment*, 9(12):912–923, August 2016. CODEN ???? ISSN 2150-8097.

Jo:2016:YHP

[1529] Insoon Jo, Duck-Ho Bae, Andre S. Yoon, Jeong-Uk Kang, Sangyeun Cho, Daniel D. G. Lee, and Jaeheon Jeong. YourSQL: a high-performance database system leveraging in-storage computing. *Proceedings of the VLDB Endowment*, 9(12):924–935, August 2016. CODEN ???? ISSN 2150-8097.

Lu:2016:LBM

[1530] Lu Lu, Xuanhua Shi, Yongluan Zhou, Xiong Zhang, Hai Jin, Cheng Pei, Ligang He, and Yuanzhen Geng. Lifetime-based memory management for distributed data processing systems. *Proceedings of the VLDB Endowment*, 9 (12):936–947, August 2016. CODEN ???? ISSN 2150-8097.

Krishnan:2016:AID

[1531] Sanjay Krishnan, Jiannan Wang, Eugene Wu, Michael J. Franklin, and Ken Goldberg. ActiveClean: interactive data cleaning for statistical modeling. *Proceedings of the VLDB Endowment*, 9(12):948–959, August 2016. CODEN ???? ISSN 2150-8097.

Elgohary:2016:CLA

[1532] Ahmed Elgohary, Matthias Boehm, Peter J. Haas, Frederick R. Reiss, and Berthold Reinwald. Compressed linear algebra for large-scale machine learning. *Proceedings of the VLDB Endowment*, 9(12):960–971, August 2016. CODEN ???? ISSN 2150-8097.

Karpathiotakis:2016:FQH

[1533] Manos Karpathiotakis, Ioannis Alagiannis, and Anastasia Ailamaki. Fast queries over heterogeneous data through engine customization. *Proceedings of the VLDB Endowment*, 9(12): 972–983, August 2016. CODEN ???? ISSN 2150-8097.

Bhowmick:2016:DDV

[1534] Sourav S. Bhowmick, Byron Choi, and Curtis Dyreson. Data-driven visual graph query interface construction and maintenance: challenges and opportunities. *Proceedings of the VLDB Endowment*, 9(12):984–992, August 2016. CODEN ???? ISSN 2150-8097.

Abedjan:2016:DDE

[1535] Ziawasch Abedjan, Xu Chu, Dong Deng, Raul Castro Fernandez, Ihab F. Ilyas, Mourad Ouzzani, Paolo Papotti, Michael Stonebraker, and Nan Tang. Detecting data errors: where are we and what needs to be done? *Proceedings of the VLDB Endowment*, 9(12):

993–1004, August 2016. CODEN ???? ISSN 2150-8097.

Liu:2016:ESH

[1536] Hai Liu, Dongqing Xiao, Pankaj Didwania, and Mohamed Y. Eltabakh. Exploiting soft and hard correlations in big data query optimization. *Proceedings of the VLDB Endowment*, 9(12): 1005–1016, August 2016. CODEN ???? ISSN 2150-8097.

Kahng:2016:IBN

[1537] Minsuk Kahng, Shamkant B. Navathe, John T. Stasko, and Duen Horng Polo Chau. Interactive browsing and navigation in relational databases. *Proceedings of the VLDB Endowment*, 9(12): 1017–1028, August 2016. CODEN ???? ISSN 2150-8097.

Borovica-Gajic:2016:CDA

[1538] Renata Borovica-Gajić, Raja Appuswamy, and Anastasia Ailamaki. Cheap data analytics using cold storage devices. *Proceedings of the VLDB Endowment*, 9(12):1029–1040, August 2016. CODEN ???? ISSN 2150-8097.

Shun:2016:PLG

[1539] Julian Shun, Farbod Roosta-Khorasani, Kimon Fountoulakis, and Michael W. Mahoney. Parallel local graph clustering. *Proceedings of the VLDB Endowment*, 9(12):1041–1052, August 2016. CODEN ???? ISSN 2150-8097.

Tong:2016:OMM

[1540] Yongxin Tong, Jieying She, Bolin Ding, Lei Chen, Tianyu Wo, and Ke Xu. Online minimum matching in real-time spatial data: experiments and analysis. *Proceedings of the VLDB Endowment*, 9(12):1053–1064, August 2016. CODEN ???? ISSN 2150-8097.

Brunel:2016:IAH

[1541] Robert Brunel, Norman May, and Alfons Kemper. Index-assisted hierarchical computations in main-memory RDBMS. *Proceedings of the VLDB Endowment*, 9(12):1065–1076, August 2016. CODEN ???? ISSN 2150-8097.

Ohsaka:2016:DIA

[1542] Naoto Ohsaka, Takuya Akiba, Yuichi Yoshida, and Ken ichi Kawarabayashi. Dynamic influence analysis in evolving networks. *Proceedings of the VLDB Endowment*, 9(12):1077–1088, August 2016. CODEN ???? ISSN 2150-8097.

Tran:2016:DBO

[1543] Luan Tran, Liyue Fan, and Cyrus Shahabi. Distance-based outlier detection in data streams. *Proceedings of the VLDB Endowment*, 9(12):1089–1100, August 2016. CODEN ???? ISSN 2150-8097.

Mountantonakis:2016:MLC

[1544] Michalis Mountantonakis and Yannis Tzitzikas. On measuring the lattice of commonalities among several linked datasets. *Proceedings of the VLDB Endowment*, 9(12):1101–1112, August 2016. CODEN ???? ISSN 2150-8097.

Chang:2016:ORD

[1545] Zhao Chang, Dong Xie, and Feifei Li. Oblivious RAM: a dissection and experimental evaluation. *Proceedings of the VLDB Endowment*, 9(12):1113–1124, August 2016. CODEN ???? ISSN 2150-8097.

Kastrati:2016:OCP

[1546] Fisnik Kastrati and Guido Moerkotte. Optimization of conjunctive predicates for main memory column stores. *Proceedings of the VLDB Endowment*, 9 (12):1125–1136, August 2016. CODEN ???? ISSN 2150-8097.

Chothia:2016:EOM

[1547] Zaheer Chothia, John Liagouris, Frank McSherry, and Timothy Roscoe. Explaining outputs in modern data analytics. *Proceedings of the VLDB Endowment*, 9(12):1137–1148, August 2016. CODEN ???? ISSN 2150-8097.

Buneman:2016:RGA

[1548] Peter Buneman and Slawek Staworko. RDF graph alignment with bisimulation. *Proceedings of the VLDB Endowment*, 9(12):1149–1160, August 2016. CODEN ???? ISSN 2150-8097.

Bursztyn:2016:TRA

[1549] Damian Bursztyn, François Goasdoué, and Ioana Manolescu. Teaching an RDBMS about ontological constraints. *Proceedings of the VLDB Endowment*, 9(12):1161–1172, August 2016. CODEN ???? ISSN 2150-8097.

Simonini:2016:BLS

[1550] Giovanni Simonini, Sonia Bergamaschi, and H. V. Jagadish. BLAST: a loosely schema-aware meta-blocking approach for entity resolution. *Proceedings of the VLDB Endowment*, 9(12):1173–1184, August 2016. CODEN ???? ISSN 2150-8097.

Zhu:2016:LEI

[1551] Erkang Zhu, Fatemeh Nargesian, Ken Q. Pu, and Renée J. Miller. LSH ensemble: Internet-scale domain search. *Proceedings of the VLDB Endowment*, 9(12):1185–1196, August 2016. CODEN ???? ISSN 2150-8097.

Konda:2016:MTBa

[1552] Pradap Konda, Sanjib Das, Paul Suganthan G. C., AnHai Doan, Adel Ardalan, Jeffrey R. Ballard, Han Li, Fatemah Panahi, Haojun Zhang, Jeff Naughton, Shishir Prasad, Ganesh Krishnan, Rohit Deep, and Vijay Raghavendra. Magellan: toward building entity matching management systems. *Proceedings of the VLDB Endowment*, 9(12):1197–1208, August 2016. CODEN ???? ISSN 2150-8097.

Saha:2016:AOD

[1553] Diptikalyan Saha, Avrilia Floratou, Karthik Sankaranarayanan, Umar Farooq Minhas, Ashish R. Mittal, and Fatma Özcan. ATHENA: an ontology-driven system for natural language querying over relational data stores. *Proceedings of the VLDB Endowment*, 9(12):1209–1220, August 2016. CODEN ???? ISSN 2150-8097.

Wesley:2016:ICC

[1554] Richard Wesley and Fei Xu. Incremental computation of common windowed holistic aggregates. *Proceedings of the VLDB Endowment*, 9(12):1221–1232, August 2016. CODEN ???? ISSN 2150-8097.

Fang:2016:ECS

[1555] Yixiang Fang, Reynold Cheng, Siqiang Luo, and Jiafeng Hu. Effective community search for large attributed graphs. *Proceedings of the VLDB Endowment*, 9(12):1233–1244, August 2016. CODEN ???? ISSN 2150-8097.

Lang:2016:TIA

[1556] Willis Lang, Karthik Ramachandra, David J. DeWitt, Shize Xu, Qun Guo, Ajay Kalhan, and Peter Carlin. Not for the timid: on the impact of aggressive over-booking in the cloud. *Proceedings of the VLDB Endowment*, 9(13):1245–1256, September 2016. CODEN ???? ISSN 2150-8097.

Sevenich:2016:UDS

[1557] Martin Sevenich, Sungpack Hong, Oskar van Rest, Zhe Wu, Jayanta Banerjee, and Hassan Chafi. Using domain-specific languages for analytic graph databases. *Proceedings of the VLDB Endowment*, 9(13):1257–1268, September 2016. CODEN ???? ISSN 2150-8097.

Liu:2016:KLM

[1558] Shaosu Liu, Bin Song, Sriharsha Gangam, Lawrence Lo, and Khaled Elmeleegy. Kodiak: leveraging materialized views for very low-latency analytics over high-dimensional web-scale data. *Proceedings of the VLDB Endowment*, 9(13):1269–1280, September 2016. CODEN ???? ISSN 2150-8097.

Sharma:2016:GRT

[1559] Aneesh Sharma, Jerry Jiang, Praveen Bommannavar, Brian Larson, and Jimmy Lin. GraphJet: real-time content recommendations at Twitter. *Proceedings of the VLDB Endowment*, 9(13):1281–1292, September 2016. CODEN ???? ISSN 2150-8097.

Ma:2016:DFP

[1560] Edward Ma, Vishrut Gupta, Meichun Hsu, and Indrajit Roy. `dmapply`: a functional primitive to express distributed machine learning algorithms in R. *Proceedings of the VLDB Endowment*, 9(13):1293–1304, September 2016. CODEN ???? ISSN 2150-8097.

Pedreira:2016:CIM

[1561] Pedro Pedreira, Chris Croswhite, and Luis Bona. Cubrick: indexing millions of records per second for interactive analytics. *Proceedings of the VLDB Endowment*, 9(13):1305–1316, September 2016. CODEN ???? ISSN 2150-8097.

Iosup:2016:LGB

[1562] Alexandru Iosup, Tim Hegeman, Wing Lung Ngai, Stijn Heldens, Arnau Prat-Pérez, Thomas Manhardto, Hassan Chafio, Mihai Capota, Narayanan Sundaram, Michael Anderson, Ilie Gabriel Tanase, Yinglong Xia, Lifeng Nai, and Peter Boncz. LDBC graphalytics: a benchmark for large-scale graph analysis on parallel and distributed platforms. *Proceedings of the VLDB Endowment*, 9(13):1317–1328, September 2016. CODEN ???? ISSN 2150-8097.

Lustosa:2016:DSS

[1563] Hermano Lustosa, Fabio Porto, Patrick Valduriez, and Pablo Blanco. Database system support of simulation data. *Proceedings of the VLDB Endowment*, 9(13):1329–1340, September 2016. CODEN ???? ISSN 2150-8097.

Jacques-Silva:2016:CRG

[1564] Gabriela Jacques-Silva, Fang Zheng, Daniel Debrunner, Kun-Lung Wu, Victor Dogaru, Eric Johnson, Michael Spicer, and Ahmet Erdem Sariyüce. Consistent regions: guaranteed tuple processing in IBM streams. *Proceedings of the VLDB Endowment*, 9(13):1341–1352, September 2016. CODEN ???? ISSN 2150-8097.

Al-Kateb:2016:HRC

[1565] Mohammed Al-Kateb, Paul Sinclair, Grace Au, and Carrie Ballinger. Hybrid row-column partitioning in Teradata(R). *Proceedings of the VLDB Endowment*, 9(13):1353–1364, September 2016. CODEN ???? ISSN 2150-8097.

Fernandes:2016:THH

[1566] Ricardo Fernandes, Piotr Zaczkowski, Bernd Göttler, Conor Ettinoffe, and Anis Moussa. TrafficDB: HERE's high performance shared-memory data store. *Proceedings of the VLDB Endowment*, 9(13):1365–1376, September 2016. CODEN ???? ISSN 2150-8097.

Scotti:2016:CBH

[1567] Alex Scotti, Mark Hannum, Michael Ponomarenko, Dorin Hogea, Akshat Sikarwar, Mohit Khullar, Adi Zaimi, James Leddy, Rivers Zhang, Fabio Angius, and Lingzhi Deng. Comdb2: Bloomberg's highly available relational database system. *Proceedings of the VLDB Endowment*, 9(13):1377–1388, September 2016. CODEN ???? ISSN 2150-8097.

Srinivasan:2016:AAR

[1568] V. Srinivasan, Brian Bulkowski, Wei-Ling Chu, Sunil Sayyaparaju, Andrew Gooding, Rajkumar Iyer, Ashish Shinde, and Thomas Lopatic. Aerospike: architecture of a real-time operational DBMS. *Proceedings of the VLDB Endowment*, 9(13):1389–1400, September 2016. CODEN ???? ISSN 2150-8097.

Chen:2016:MQO

[1569] Jack Chen, Samir Jindel, Robert Walzer, Rajkumar Sen, Nika Jimsheleishvilli, and Michael Andrews. The MemSQL query optimizer: a modern optimizer for real-time analytics in a distributed database. *Proceedings of the VLDB Endowment*, 9(13):1401–1412, September 2016. CODEN ???? ISSN 2150-8097.

Lakshman:2016:NFS

[1570] Sarath Lakshman, Sriram Melkote, John Liang, and Ravi Mayuram. Nitro: a fast, scalable in-memory storage engine for NoSQL global secondary index. *Proceedings of the VLDB Endowment*, 9(13):1413–1424, September 2016. CODEN ???? ISSN 2150-8097.

Boehm:2016:SDM

[1571] Matthias Boehm, Michael W. Dusenberry, Deron Eriksson, Alexandre V. Evfimievski, Faraz Makari Manshadi, Niketan Pansare, Berthold Reinwald, Frederick R. Reiss, Prithviraj Sen, Arvind C. Surve, and Shirish Tatikonda. SystemML: declarative machine learning on spark. *Proceedings of the VLDB Endowment*, 9(13):1425–1436, September 2016. CODEN ???? ISSN 2150-8097.

Mishra:2016:AAD

[1572] Aurosish Mishra, Shasank Chavan, Allison Holloway, Tirthankar Lahiri, Zhen Hua Liu, Sunil Chakkappen, Dennis Lui, Vinita Subramanian, Ramesh Kumar, Maria Colgan, Jesse Kamp, Niloy Mukherjee, and Vineet Marwah. Accelerating analytics with dynamic in-memory expressions. *Proceedings of the VLDB Endowment*, 9(13):1437–1448, September 2016. CODEN ???? ISSN 2150-8097.

Bhadange:2016:GSL

[1573] Satyajit Bhadange, Akhil Arora, and Arnab Bhattacharya. GARUDA: a system for large-scale mining of statistically significant connected subgraphs. *Proceedings of the VLDB Endowment*, 9(13):1449–1452, September 2016. CODEN ???? ISSN 2150-8097.

Li:2016:VVT

[1574] Huan Li, Hua Lu, Xin Chen, Gang Chen, Ke Chen, and Lidan Shou. Vita: a versatile toolkit for generating indoor mobility data for real-world buildings. *Proceedings of the VLDB Endowment*, 9(13):1453–1456, September 2016. CODEN ???? ISSN 2150-8097.

Bagan:2016:GFW

[1575] Guillaume Bagan, Angela Bonifati, Radu Ciucanu, George H. L. Fletcher, Aurélien Lemay, and Nicky Advokaat. Generating flexible workloads for graph databases. *Proceedings of the VLDB Endowment*, 9(13):1457–1460, September 2016. CODEN ???? ISSN 2150-8097.

Zhou:2016:AQP

[1576] Xiaofeng Zhou, Yang Chen, and Daisy Zhe Wang. ArchimedesOne: query processing over probabilistic knowledge bases. *Proceedings of the VLDB Endowment*, 9(13):1461–1464, September 2016. CODEN ???? ISSN 2150-8097.

Milo:2016:RIR

[1577] Tova Milo, Slava Novgorodov, and Wang-Chiew Tan. Rudolf: interactive rule refinement system for fraud detection. *Proceedings of the VLDB Endowment*, 9(13):1465–1468, September 2016. CODEN ???? ISSN 2150-8097.

Maccioni:2016:GDB

[1578] Antonio Maccioni and Matteo Collina. Graph databases in the browser: using LevelGraph to explore New Delhi. *Proceedings of the VLDB Endowment*, 9(13):1469–1472, September 2016. CODEN ???? ISSN 2150-8097.

Sellam:2016:ZCQ

[1579] Thibault Sellam and Martin Kersten. Ziggy: characterizing query results for data explorers. *Proceedings of the VLDB Endowment*, 9(13):1473–1476, September 2016. CODEN ???? ISSN 2150-8097.

Sellam:2016:BMN

[1580] Thibault Sellam, Robin Cijvat, Richard Koopmanschap, and Martin Kersten. Blaeu: mapping and navigating large tables with cluster analysis. *Proceedings of the VLDB Endowment*, 9(13): 1477–1480, September 2016. CODEN ???? ISSN 2150-8097.

El-Roby:2016:SQR

[1581] Ahmed El-Roby, Khaled Ammar, Ashraf Aboulnaga, and Jimmy Lin. Sapphire: querying RDF data made simple. *Proceedings of the VLDB Endowment*, 9(13):1481–1484, September 2016. CODEN ???? ISSN 2150-8097.

Amsterdamer:2016:DDT

[1582] Yael Amsterdamer, Tova Milo, Amit Somech, and Brit Youngmann. December: a declarative tool for crowd member selection. *Proceedings of the VLDB Endowment*, 9(13):1485–1488, September 2016. CODEN ???? ISSN 2150-8097.

He:2016:DVV

[1583] Xi He, Nisarg Raval, and Ashwin Machanavajjhala. A demonstration of VisDPT: visual exploration of differentially private trajectories. *Proceedings of the VLDB Endowment*, 9(13):1489–1492, September 2016. CODEN ???? ISSN 2150-8097.

Scheuer:2016:JSA

[1584] Tobias Scheuer, Norman May, Alexander Böhm, and Daniel Scheibli. JexLog: a sonar for the abyss. *Proceedings of the VLDB Endowment*, 9(13):1493–1496, September 2016. CODEN ???? ISSN 2150-8097.

Ikeda:2016:CCC

[1585] Kosetsu Ikeda, Atsuyuki Morishima, Habibur Rahman, Senjuti Basu Roy, Saravanan Thirumuruganathan, Sihem Amer-Yahia, and Gautam Das. Collaborative crowdsourcing with Crowd4u. *Proceedings of the VLDB Endowment*, 9(13):1497–1500, September 2016. CODEN ???? ISSN 2150-8097.

Chen:2016:YWQ

[1586] Lei Chen, Jianliang Xu, Christian S. Jensen, and Yafei Li. YASK: a why-not question answering engine for spatial keyword query services. *Proceedings of the VLDB Endowment*, 9(13): 1501–1504, September 2016. CODEN ???? ISSN 2150-8097.

Yi:2016:AVQ

[1587] Peipei Yi, Byron Choi, Sourav S. Bhowmick, and Jianliang Xu. AutoG: a visual query autocompletion framework for graph databases. *Proceedings of the VLDB Endowment*, 9(13):1505–1508, September 2016. CODEN ???? ISSN 2150-8097.

Miao:2016:SPR

[1588] Xiaoye Miao, Yunjun Gao, Gang Chen, Huiyong Cui, Chong Guo, and Weida Pan. Si^2 p: a restaurant recommendation system using preference queries over incomplete information. *Proceedings of the VLDB Endowment*, 9(13): 1509–1512, September 2016. CODEN ???? ISSN 2150-8097.

Bonaque:2016:MIQ

[1589] R. Bonaque, T. D. Cao, B. Cautis, F. Goasdoué, J. Letelier, I. Manolescu, O. Mendoza, S. Ribeiro, and X. Tannier. Mixed-instance querying: a lightweight integration architecture for data journalism. *Proceedings of the VLDB Endowment*, 9(13):1513–1516, September 2016. CODEN ???? ISSN 2150-8097.

Butterstein:2016:PPS

[1590] Dennis Butterstein and Torsten Grust. Precision performance surgery for CostgreSQL: LLVM-based expression compilation, just in time. *Proceedings of the VLDB Endowment*, 9(13):1517–1520, September 2016. CODEN ???? ISSN 2150-8097.

Yahya:2016:EQE

[1591] Mohamed Yahya, Klaus Berberich, Maya Ramanath, and Gerhard Weikum. Exploratory querying of extended knowledge graphs. *Proceedings of the VLDB Endowment*, 9(13):1521–1524, September 2016. CODEN ???? ISSN 2150-8097.

Panev:2016:EDR

[1592] Kiril Panev, Sebastian Michel, Evica Milchevski, and Koninika Pal. Exploring databases via reverse engineering ranking queries with PALEO. *Proceedings of the VLDB Endowment*, 9(13): 1525–1528, September 2016. CODEN ???? ISSN 2150-8097.

Bespinyowong:2016:EER

[1593] Ramon Bespinyowong, Wei Chen, H. V. Jagadish, and Yuxin Ma. ExRank: an exploratory ranking interface. *Proceedings of the VLDB Endowment*, 9(13):1529–1532, September 2016. CODEN ???? ISSN 2150-8097.

Diaz:2016:SQR

[1594] Gonzalo Diaz, Marcelo Arenas, and Michael Benedikt. SPARQLByE: querying RDF data by example. *Proceedings of the VLDB Endowment*, 9 (13):1533–1536, September 2016. CODEN ???? ISSN 2150-8097.

Deutch:2016:NNL

[1595] Daniel Deutch, Nave Frost, and Amir Gilad. NLProv: natural language provenance. *Proceedings of the VLDB Endowment*, 9(13):1537–1540, September 2016. CODEN ???? ISSN 2150-8097.

Chandra:2016:PMA

[1596] Bikash Chandra, Mathew Joseph, Bharath Radhakrishnan, Shreevidhya Acharya, and S. Sudarshan. Partial marking for automated grading of SQL queries. *Proceedings of the VLDB Endowment*, 9(13):1541–1544, September 2016. CODEN ???? ISSN 2150-8097.

Zhao:2016:TPM

[1597] Kaiqi Zhao, Yiding Liu, Quan Yuan, Lisi Chen, Zhida Chen, and Gao Cong. Towards personalized maps: mining user preferences from geo-textual data. *Proceedings of the VLDB Endowment*, 9(13):1545–1548, September 2016. CODEN ???? ISSN 2150-8097.

Feng:2016:SRS

[1598] Kaiyu Feng, Kaiqi Zhao, Yiding Liu, and Gao Cong. A system for region search and exploration. *Proceedings of the VLDB Endowment*, 9(13):1549–1552, September 2016. CODEN ???? ISSN 2150-8097.

Vitorovic:2016:SSR

[1599] Aleksandar Vitorovic, Mohammed Elseidy, Khayyam Guliyev, Khue Vu Minh, Daniel Espino, Mohammad Dashti, Yannis Klonatos, and Christoph Koch. Squall: scalable real-time analytics. *Proceedings of the VLDB Endowment*, 9(13):1553–1556, September 2016. CODEN ???? ISSN 2150-8097.

Khurana:2016:GBE

[1600] Udayan Khurana, Srinivasan Parthasarathy, and Deepak Turaga. Graph-based exploration of non-graph datasets. *Proceedings of the VLDB Endowment*, 9 (13):1557–1560, September 2016. CODEN ???? ISSN 2150-8097.

Liu:2016:RDF

[1601] Minjian Liu and Qing Wang. Rogas: a declarative framework for network analytics. *Proceedings of the VLDB Endowment*, 9(13):1561–1564, September 2016. CODEN ???? ISSN 2150-8097.

Tang:2016:LDM

[1602] Mingjie Tang, Yongyang Yu, Qutaibah M. Malluhi, Mourad Ouzzani, and Walid G. Aref. LocationSpark: a distributed in-memory data management system for big spatial data. *Proceedings of the VLDB Endowment*, 9(13): 1565–1568, September 2016. CODEN ???? ISSN 2150-8097.

Shanbhag:2016:ASC

[1603] Anil Shanbhag, Alekh Jindal, Yi Lu, and Samuel Madden. Amoeba: a shape changing storage system for big data. *Proceedings of the VLDB Endowment*, 9(13):1569–1572, September 2016. CODEN ???? ISSN 2150-8097.

Olteanu:2016:FRM

[1604] Dan Olteanu and Maximilian Schleich. F: regression models over factorized views. *Proceedings of the VLDB Endowment*, 9(13):1573–1576, September 2016. CODEN ???? ISSN 2150-8097.

Rodriguez:2016:SMP

[1605] Miguel Rodríguez, Sean Goldberg, and Daisy Zhe Wang. SigmaKB: multiple probabilistic knowledge base fusion. *Proceedings of the VLDB Endowment*, 9(13):1577–1580, September 2016. CODEN ???? ISSN 2150-8097.

Konda:2016:MTBb

[1606] Pradap Konda, Sanjib Das, Paul Suganthan G. C., AnHai Doan, Adel Ardalan, Jeffrey R. Ballard, Han Li, Fatemah Panahi, Haojun Zhang, Jeff Naughton, Shishir Prasad, Ganesh Krishnan, Rohit Deep, and Vijay Raghavendra. Magellan: toward building entity matching management systems over data science stacks. *Proceedings of the VLDB Endowment*, 9(13): 1581–1584, September 2016. CODEN ???? ISSN 2150-8097.

Alkowaileet:2016:LSC

[1607] Wail Y. Alkowaileet, Sattam Alsubaiee, Michael J. Carey, Till Westmann, and Yingyi Bu. Large-scale complex analytics on semi-structured datasets using AsterixDB and Spark. *Proceedings of the VLDB Endowment*, 9(13):1585–1588, September 2016. CODEN ???? ISSN 2150-8097.

Picado:2016:SIS

[1608] Jose Picado, Parisa Ataei, Arash Termehchy, and Alan Fern. Schema independent and scalable relational learning by Castor. *Proceedings of the VLDB Endowment*, 9(13):1589–1592, September 2016. CODEN ???? ISSN 2150-8097.

Kannapalli:2016:AWA

[1609] Rajeshkumar Kannapalli, Azade Nazi, Mahashweta Das, and Gautam Das. AD-WIRE: add-on for Web item reviewing system. *Proceedings of the VLDB Endowment*, 9(13):1593–1596, September 2016. CODEN ???? ISSN 2150-8097.

Chaoji:2016:MLR

[1610] Vineet Chaoji, Rajeev Rastogi, and Gourav Roy. Machine learning in the real world. *Proceedings of the VLDB Endowment*, 9(13):1597–1600, September 2016. CODEN ???? ISSN 2150-8097.

Bohm:2016:OAD

[1611] Alexander Böhm, Jens Dittrich, Niloy Mukherjee, Ippokratis Pandis, and Rajkumar Sen. Operational analytics data management systems. *Proceedings of the VLDB Endowment*, 9(13):1601–1604, September 2016. CODEN ???? ISSN 2150-8097.

Chu:2016:QDC

[1612] Xu Chu and Ihab F. Ilyas. Qualitative data cleaning. *Proceedings of the VLDB Endowment*, 9(13):1605–1608, September 2016. CODEN ???? ISSN 2150-8097.

Larson:2016:MMM

[1613] Per-Åke Larson and Justin Levandoski. Modern main-memory database systems. *Proceedings of the VLDB Endowment*, 9(13):1609–1610, September 2016. CODEN ???? ISSN 2150-8097.

Machanavajjhala:2016:DPW

[1614] Ashwin Machanavajjhala, Xi He, and Michael Hay. Differential privacy in the wild: a tutorial on current practices & open challenges. *Proceedings of the VLDB Endowment*, 9(13):1611–1614, September 2016. CODEN ???? ISSN 2150-8097.

Amer-Yahia:2016:HFC

[1615] Sihem Amer-Yahia and Senjuti Basu Roy. Human factors in crowdsourcing. *Proceedings of the VLDB Endowment*, 9(13):1615–1618, September 2016. CODEN ???? ISSN 2150-8097.

Stoica:2016:TCB

[1616] Ion Stoica. Trends and challenges in big data processing. *Proceedings of the VLDB Endowment*, 9(13):1619, September 2016. CODEN ???? ISSN 2150-8097.

Rajaraman:2016:DDD

[1617] Anand Rajaraman. Data-driven disruption: the view from Silicon Valley. *Proceedings of the VLDB Endowment*, 9(13):1620, September 2016. CODEN ???? ISSN 2150-8097.

Dong:2016:LNV

[1618] Xin Luna Dong. Leave no valuable data behind: the crazy ideas and the business. *Proceedings of the VLDB Endowment*, 9(13):1621, September 2016. CODEN ???? ISSN 2150-8097.

Mokbel:2016:LDM

[1619] Mohamed Mokbel, Chi-Yin Chow, and Walid Aref. Location data management: a tale of two systems and the "next destination"! *Proceedings of the VLDB Endowment*, 9(13):1622, September 2016. CODEN ???? ISSN 2150-8097.

Chandramouli:2016:QET

[1620] Badrish Chandramouli, Raul Castro Fernandez, Jonathan Goldstein, Ahmed Eldawy, and Abdul Quamar. Quill: efficient, transferable, and rich analytics at scale. *Proceedings of the VLDB Endowment*, 9(14):1623–1634, October 2016. CODEN ???? ISSN 2150-8097.

Walenz:2016:PAD

[1621] Brett Walenz and Jun Yang. Perturbation analysis of database queries. *Proceedings of the VLDB Endowment*, 9 (14):1635–1646, October 2016. CODEN ???? ISSN 2150-8097.

Li:2016:HBG

[1622] Jing Li, Hung-Wei Tseng, Chunbin Lin, Yannis Papakonstantinou, and Steven Swanson. HippogriffDB: balancing I/O and GPU bandwidth in big data analytics. *Proceedings of the VLDB Endowment*, 9(14):1647–1658, October 2016. CODEN ???? ISSN 2150-8097.

Zeuch:2016:NIP

[1623] Steffen Zeuch, Holger Pirk, and Johann-Christoph Freytag. Non-invasive progressive optimization for in-memory databases. *Proceedings of the VLDB Endowment*, 9(14):1659–1670, October 2016. CODEN ???? ISSN 2150-8097.

Zhang:2016:DSS

[1624] J. W. Zhang and Y. C. Tay. Dscaler: synthetically scaling a given relational database. *Proceedings of the VLDB Endowment*, 9(14):1671–1682, October 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:FAI

[1625] Sheng Wang, David Maier, and Beng Chin Ooi. Fast and adaptive indexing of multi-dimensional observational data. *Proceedings of the VLDB Endowment*, 9(14):1683–1694, October 2016. CODEN ???? ISSN 2150-8097.

Upadhyaya:2016:POQ

[1626] Prasang Upadhyaya, Magdalena Balazinska, and Dan Suciu. Price-optimal querying with data APIs. *Proceedings of the VLDB Endowment*, 9(14):1695–1706, October 2016. CODEN ???? ISSN 2150-8097.

Pirk:2016:VVA

[1627] Holger Pirk, Oscar Moll, Matei Zaharia, and Sam Madden. Voodoo — a vector algebra for portable database performance on modern hardware. *Proceedings of the VLDB Endowment*, 9 (14):1707–1718, October 2016. CODEN ???? ISSN 2150-8097.

Jiang:2016:CQP

[1628] Dawei Jiang, Qingchao Cai, Gang Chen, H. V. Jagadish, Beng Chin Ooi, Kian-Lee Tan, and Anthony K. H. Tung. Cohort query processing. *Proceedings of the VLDB Endowment*, 10 (1):1–12, September 2016. CODEN ???? ISSN 2150-8097.

Wu:2016:RWY

[1629] Yubao Wu, Yuchen Bian, and Xiang Zhang. Remember where you came from: on the second-order random walk based proximity measures. *Proceedings of the VLDB Endowment*, 10(1):13–24, September 2016. CODEN ???? ISSN 2150-8097.

George:2016:MIL

[1630] Lars George, Bruno Cadonna, and Matthias Weidlich. IL-Miner: instance-level discovery of complex event patterns. *Proceedings of the VLDB Endowment*, 10(1):25–36, September 2016. CODEN ???? ISSN 2150-8097.

Psaroudakis:2016:ANA

[1631] Iraklis Psaroudakis, Tobias Scheuer, Norman May, Abdelkader Sellami, and Anastasia Ailamaki. Adaptive NUMA-aware data placement and task scheduling for analytical workloads in main-memory column-stores. *Proceedings of the VLDB Endowment*, 10(2):37–48, October 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:MOC

[1632] Tianzheng Wang and Hideaki Kimura. Mostly-optimistic concurrency control for highly contended dynamic workloads on a thousand cores. *Proceedings of the VLDB Endowment*, 10(2):49–60, October 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:EIA

[1633] Sibo Wang, Xiaokui Xiao, Yin Yang, and Wenqing Lin. Effective indexing for approximate constrained shortest path queries on large road networks. *Proceedings of the VLDB Endowment*, 10(2):61–72, October 2016. CODEN ???? ISSN 2150-8097.

Huang:2016:THP

[1634] Qun Huang and Patrick P. C. Lee. Toward high-performance distributed stream processing via approximate fault tolerance. *Proceedings of the VLDB Endowment*, 10(3):73–84, November 2016. CODEN ???? ISSN 2150-8097.

Dai:2016:PCD

[1635] Jian Dai, Bin Yang, Chenjuan Guo, Christian S. Jensen, and Jilin Hu. Path cost distribution estimation using trajectory data. *Proceedings of the VLDB Endowment*, 10(3):85–96, November 2016. CODEN ???? ISSN 2150-8097.

Sariyuce:2016:FHC

[1636] Ahmet Erdem Sariyüce and Ali Pinar. Fast hierarchy construction for dense subgraphs. *Proceedings of the VLDB Endowment*, 10(3):97–108, November 2016. CODEN ???? ISSN 2150-8097.

Zhang:2016:SEE

[1637] Xuhong Zhang, Jun Wang, and Jiangling Yin. Sapprox: enabling efficient and accurate approximations on subdatasets with distribution-aware online sampling. *Proceedings of the VLDB Endowment*, 10(3):109–120, November 2016. CODEN ???? ISSN 2150-8097.

Ren:2016:MQO

[1638] Xuguang Ren and Junhu Wang. Multiquery optimization for subgraph isomorphism search. *Proceedings of the VLDB Endowment*, 10(3):121–132, November 2016. CODEN ???? ISSN 2150-8097.

Simpson:2016:ECF

[1639] Michael Simpson, Venkatesh Srinivasan, and Alex Thomo. Efficient computation of feedback arc set at webscale. *Proceedings of the VLDB Endowment*, 10(3):133–144, November 2016. CODEN ???? ISSN 2150-8097.

Antenucci:2016:DQP

[1640] Dolan Antenucci, Michael R. Anderson, and Michael Cafarella. A declarative query processing system for nowcasting. *Proceedings of the VLDB Endowment*, 10(3):145–156, November 2016. CODEN ???? ISSN 2150-8097.

Lulli:2016:NDS

[1641] Alessandro Lulli, Matteo Dell'Amico, Pietro Michiardi, and Laura Ricci. NG-DBSCAN: scalable density-based clustering for arbitrary data. *Proceedings of the VLDB Endowment*, 10(3):157–168, November 2016. CODEN ???? ISSN 2150-8097.

Neamtu:2016:ITS

[1642] Rodica Neamtu, Ramoza Ahsan, Elke Rundensteiner, and Gabor Sarkozy. Interactive time series exploration powered by the marriage of similarity distances. *Proceedings of the VLDB Endowment*, 10(3):169–180, November 2016. CODEN ???? ISSN 2150-8097.

Li:2016:CLI

[1643] Youhuan Li, Lei Zou, Huaming Zhang, and Dongyan Zhao. Computing longest increasing subsequences over sequential data streams. *Proceedings of the VLDB Endowment*, 10(3):181–192, November 2016. CODEN ???? ISSN 2150-8097.

Chirigati:2016:KEU

[1644] Fernando Chirigati, Jialu Liu, Flip Korn, You (Will) Wu, Cong Yu, and Hao Zhang. Knowledge exploration using tables on the web. *Proceedings of the VLDB Endowment*, 10(3):193–204, November 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:HEI

[1645] Sibo Wang, Youze Tang, Xiaokui Xiao, Yin Yang, and Zengxiang Li. HubPPR: effective indexing for approximate Personalized Pagerank. *Proceedings of the VLDB Endowment*, 10(3):205–216, November 2016. CODEN ???? ISSN 2150-8097.

Lai:2016:SDS

[1646] Longbin Lai, Lu Qin, Xuemin Lin, Ying Zhang, Lijun Chang, and Shiyu Yang. Scalable distributed subgraph enumeration. *Proceedings of the VLDB Endowment*, 10(3):217–228, November 2016. CODEN ???? ISSN 2150-8097.

Fujiwara:2016:FAL

[1647] Yasuhiro Fujiwara, Yasutoshi Ida, Junya Arai, Mai Nishimura, and Sotetsu Iwamura. Fast algorithm for the lasso based L_1-graph construction. *Proceedings of the VLDB Endowment*, 10(3):229–240, November 2016. CODEN ???? ISSN 2150-8097.

Zhai:2016:RTS

[1648] Ennan Zhai, Zhenhua Li, Zhenyu Li, Fan Wu, and Guihai Chen. Resisting tag spam by leveraging implicit user behaviors. *Proceedings of the VLDB Endowment*, 10(3):241–252, November 2016. CODEN ???? ISSN 2150-8097.

Chen:2016:GFE

[1649] Xiaowei Chen, Yongkun Li, Pinghui Wang, and John C. S. Lui. A general framework for estimating graphlet statistics via random walk. *Proceedings of the VLDB Endowment*, 10(3):253–264, November 2016. CODEN ???? ISSN 2150-8097.

Lin:2016:FMS

[1650] Chunbin Lin, Benjamin Mandel, Yannis Papakonstantinou, and Matthias Springer. Fast in-memory SQL analytics on typed graphs. *Proceedings of the VLDB Endowment*, 10(3):265–276, November 2016. CODEN ???? ISSN 2150-8097.

Li:2016:SDA

[1651] Zheng Li and Tingjian Ge. Stochastic data acquisition for answering queries as time goes by. *Proceedings of the VLDB Endowment*, 10(3):277–288, November 2016. CODEN ???? ISSN 2150-8097.

Dai:2016:FPI

[1652] Haipeng Dai, Muhammad Shahzad, Alex X. Liu, and Yuankun Zhong. Finding persistent items in data streams. *Proceedings of the VLDB Endowment*, 10(4):289–300, November 2016. CODEN ???? ISSN 2150-8097.

Xu:2016:BSD

[1653] Shuotao Xu, Sungjin Lee, Sang-Woo Jun, Ming Liu, Jamey Hicks, and Arvind. Bluecache: a scalable distributed flash-based key–value store. *Proceedings of the VLDB Endowment*, 10(4):301–312, November 2016. CODEN ???? ISSN 2150-8097.

Fan:2016:GPP

[1654] Qi Fan, Dongxiang Zhang, Huayu Wu, and Kian-Lee Tan. A general and parallel platform for mining co-movement patterns over large-scale trajectories. *Proceedings of the VLDB Endowment*, 10(4):313–324, November 2016. CODEN ???? ISSN 2150-8097.

Shao:2016:VTE

[1655] Zhou Shao, Muhammad Aamir Cheema, David Taniar, and Hua Lu. VIP-Tree: an effective index for indoor spatial queries. *Proceedings of the VLDB Endowment*, 10(4):325–336, November 2016. CODEN ???? ISSN 2150-8097.

Arulraj:2016:WBL

[1656] Joy Arulraj, Matthew Perron, and Andrew Pavlo. Write-behind logging. *Proceedings of the VLDB Endowment*, 10 (4):337–348, November 2016. CODEN ???? ISSN 2150-8097.

Papadopoulos:2016:TAD

[1657] Stavros Papadopoulos, Kushal Datta, Samuel Madden, and Timothy Mattson. The TileDB array data storage manager. *Proceedings of the VLDB Endowment*, 10(4):349–360, November 2016. CODEN ???? ISSN 2150-8097.

Zheng:2016:DDA

[1658] Yudian Zheng, Guoliang Li, and Reynold Cheng. DOCS: a domain-aware crowdsourcing system using knowledge bases. *Proceedings of the VLDB Endowment*, 10(4):361–372, November 2016. CODEN ???? ISSN 2150-8097.

Wang:2016:LHC

[1659] Yue Wang, Alexandra Meliou, and Gerome Miklau. Lifting the haze off the cloud: a consumer-centric market for database computation in the cloud. *Proceedings of the VLDB Endowment*, 10(4):373–384, November 2016. CODEN ???? ISSN 2150-8097.

Yu:2016:TBO

[1660] Jia Yu and Mohamed Sarwat. Two birds, one stone: a fast, yet lightweight, indexing scheme for modern database systems. *Proceedings of the VLDB Endowment*, 10(4):385–396, November 2016. CODEN ???? ISSN 2150-8097.

Li:2016:HMF

[1661] Zheng Li and Tingjian Ge. History is a mirror to the future: best-effort approximate complex event matching with insufficient resources. *Proceedings of the VLDB Endowment*, 10(4):397–408, November 2016. CODEN ???? ISSN 2150-8097.

Avni:2016:PHT

[1662] Hillel Avni and Trevor Brown. Persistent hybrid transactional memory for databases. *Proceedings of the VLDB Endowment*, 10(4):409–420, November 2016. CODEN ???? ISSN 2150-8097.

Sun:2016:SOP

[1663] Liwen Sun, Michael J. Franklin, Jiannan Wang, and Eugene Wu. Skipping-oriented partitioning for columnar layouts. *Proceedings of the VLDB Endowment*, 10(4):421–432, November 2016. CODEN ???? ISSN 2150-8097.

Singh:2016:EQU

[1664] Sneha Aman Singh, Divesh Srivastava, and Srikanta Tirthapura. Estimating quantiles from the union of historical and streaming data. *Proceedings of the VLDB Endowment*, 10(4):433–444, November 2016. CODEN ???? ISSN 2150-8097.

Serafini:2016:CFG

[1665] Marco Serafini, Rebecca Taft, Aaron J. Elmore, Andrew Pavlo, Ashraf Aboulnaga, and Michael Stonebraker. Clay: fine-grained adaptive partitioning for general database schemas. *Proceedings of the VLDB Endowment*, 10(4):445–456, November 2016. CODEN ???? ISSN 2150-8097.

Siddiqui:2016:EDE

[1666] Tarique Siddiqui, Albert Kim, John Lee, Karrie Karahalios, and Aditya Parameswaran. Effortless data exploration with zenvisage: an expressive and interactive visual analytics system. *Proceedings of the VLDB Endowment*, 10(4):457–468, November 2016. CODEN ???? ISSN 2150-8097.

Ceccarello:2017:MSA

[1667] Matteo Ceccarello, Andrea Pietracaprina, Geppino Pucci, and Eli Upfal. MapReduce and streaming algorithms for diversity maximization in metric spaces of bounded doubling dimension. *Proceedings of the VLDB Endowment*, 10(5):469–480, January 2017. CODEN ???? ISSN 2150-8097.

Bindschaedler:2017:PDP

[1668] Vincent Bindschaedler, Reza Shokri, and Carl A. Gunter. Plausible deniability for privacy-preserving data synthesis. *Proceedings of the VLDB Endowment*, 10(5):481–492, January 2017. CODEN ???? ISSN 2150-8097.

Verma:2017:ECP

[1669] Shiv Verma, Luke M. Leslie, Yosub Shin, and Indranil Gupta. An experimental comparison of partitioning strategies in distributed graph processing. *Proceedings of the VLDB Endowment*, 10(5):493–504, January 2017. CODEN ???? ISSN 2150-8097.

Chandramouli:2017:SPR

[1670] Badrish Chandramouli and Jonathan Goldstein. Shrink: prescribing resiliency solutions for streaming. *Proceedings of the VLDB Endowment*, 10(5):505–516, January 2017. CODEN ???? ISSN 2150-8097.

Barthels:2017:DJA

[1671] Claude Barthels, Ingo Müller, Timo Schneider, Gustavo Alonso, and Torsten Hoefler. Distributed join algorithms on thousands of cores. *Proceedings of the VLDB Endowment*, 10(5):517–528, January 2017. CODEN ???? ISSN 2150-8097.

Liu:2017:CBS

[1672] Junling Liu, Ke Deng, Huanliang Sun, Yu Ge, Xiaofang Zhou, and Christian S. Jensen. Clue-based spatio-textual query. *Proceedings of the VLDB Endowment*, 10(5):529–540, January 2017. CODEN ???? ISSN 2150-8097.

Zheng:2017:TIC

[1673] Yudian Zheng, Guoliang Li, Yuanbing Li, Caihua Shan, and Reynold Cheng. Truth inference in crowdsourcing: is the problem solved? *Proceedings of the VLDB Endowment*, 10(5):541–552, January 2017. CODEN ???? ISSN 2150-8097.

Harding:2017:EDC

[1674] Rachael Harding, Dana Van Aken, Andrew Pavlo, and Michael Stonebraker. An evaluation of distributed concurrency control. *Proceedings of the VLDB*

Endowment, 10(5):553–564, January 2017. CODEN ???? ISSN 2150-8097.

Cui:2017:KLQ

[1675] Wanyun Cui, Yanghua Xiao, Haixun Wang, Yangqiu Song, Seung won Hwang, and Wei Wang. KBQA: learning question answering over QA corpora and knowledge bases. *Proceedings of the VLDB Endowment*, 10(5):565–576, January 2017. CODEN ???? ISSN 2150-8097.

Deutch:2017:PNL

[1676] Daniel Deutch, Nave Frost, and Amir Gilad. Provenance for natural language queries. *Proceedings of the VLDB Endowment*, 10(5):577–588, January 2017. CODEN ???? ISSN 2150-8097.

Lu:2017:AAP

[1677] Yi Lu, Anil Shanbhag, Alekh Jindal, and Samuel Madden. AdaptDB: adaptive partitioning for distributed joins. *Proceedings of the VLDB Endowment*, 10(5):589–600, January 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:EES

[1678] Zhipeng Zhang, Yingxia Shao, Bin Cui, and Ce Zhang. An experimental evaluation of SimRank-based similarity search algorithms. *Proceedings of the VLDB Endowment*, 10(5):601–612, January 2017. CODEN ???? ISSN 2150-8097.

Faleiro:2017:HPT

[1679] Jose M. Faleiro, Daniel J. Abadi, and Joseph M. Hellerstein. High performance transactions via early write visibility. *Proceedings of the VLDB Endowment*, 10(5):613–624, January 2017. CODEN ???? ISSN 2150-8097.

Eswaran:2017:ZBP

[1680] Dhivya Eswaran, Stephan Günnemann, Christos Faloutsos, Disha Makhija, and Mohit Kumar. ZooBP: belief propagation for heterogeneous networks. *Proceedings of the VLDB Endowment*, 10 (5):625–636, January 2017. CODEN ???? ISSN 2150-8097.

Lyu:2017:USV

[1681] Min Lyu, Dong Su, and Ninghui Li. Understanding the sparse vector technique for differential privacy. *Proceedings of the VLDB Endowment*, 10(6): 637–648, February 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:OEA

[1682] Fan Zhang, Wenjie Zhang, Ying Zhang, Lu Qin, and Xuemin Lin. OLAK: an efficient algorithm to prevent unraveling in social networks. *Proceedings of the VLDB Endowment*, 10(6):649–660, February 2017. CODEN ???? ISSN 2150-8097.

Khan:2017:DTI

[1683] Meraj Khan, Larry Xu, Arnab Nandi, and Joseph M. Hellerstein. Data tweening: incremental visualization of data transforms. *Proceedings of the VLDB Endowment*, 10(6):661–672, February 2017. CODEN ???? ISSN 2150-8097.

Bater:2017:SSQ

[1684] Johes Bater, Gregory Elliott, Craig Eggen, Satyender Goel, Abel Kho, and Jennie Rogers. SMCQL: secure querying for federated databases. *Proceedings of the VLDB Endowment*, 10(6): 673–684, February 2017. CODEN ???? ISSN 2150-8097.

Zamanian:2017:EMD

[1685] Erfan Zamanian, Carsten Binnig, Tim Harris, and Tim Kraska. The end of a myth: distributed transactions can scale. *Proceedings of the VLDB Endowment*, 10(6):685–696, February 2017. CODEN ???? ISSN 2150-8097.

Zhu:2017:NIG

[1686] Haohan Zhu, Xianrui Meng, and George Kollios. NED: an inter-graph node metric based on edit distance. *Proceedings of the VLDB Endowment*, 10(6):697–708, February 2017. CODEN ???? ISSN 2150-8097.

Fang:2017:ECS

[1687] Yixiang Fang, Reynold Cheng, Xiaodong Li, Siqiang Luo, and Jiafeng Hu. Effective community search over large spatial graphs. *Proceedings of the VLDB Endowment*, 10(6):709–720, February 2017. CODEN ???? ISSN 2150-8097.

Szlichta:2017:ECD

[1688] Jarosław Szlichta, Parke Godfrey, Lukasz Golab, Mehdi Kargar, and Divesh Srivastava. Effective and complete discovery of order dependencies via set-based axiomatization. *Proceedings of the VLDB Endowment*, 10(7):721–732, March 2017. CODEN ???? ISSN 2150-8097.

Karnagel:2017:AWP

[1689] Tomas Karnagel, Dirk Habich, and Wolfgang Lehner. Adaptive work placement for query processing on heterogeneous computing resources. *Proceedings of the VLDB Endowment*, 10(7):733–744, March 2017. CODEN ???? ISSN 2150-8097.

Yang:2017:LFE

[1690] Fan Yang, Fanhua Shang, Yuzhen Huang, James Cheng, Jinfeng Li, Yunjian Zhao, and Ruihao Zhao. LFTF: a framework for efficient tensor analytics at scale. *Proceedings of the VLDB Endowment*, 10(7):745–756, March 2017. CODEN ???? ISSN 2150-8097.

Gupta:2017:LSM

[1691] Shalmoli Gupta, Ravi Kumar, Kefu Lu, Benjamin Moseley, and Sergei Vassilvitskii. Local search methods for k-means with outliers. *Proceedings of the VLDB Endowment*, 10(7):757–768, March 2017. CODEN ???? ISSN 2150-8097.

Casanova:2017:DTR

[1692] Guillaume Casanova, Elias Englmeier, Michael E. Houle, Peer Kröger, Michael Nett, Erich Schubert, and Arthur Zimek. Dimensional testing for reverse k-nearest neighbor search. *Proceedings of the VLDB Endowment*, 10(7):769–780, March 2017. CODEN ???? ISSN 2150-8097.

Wu:2017:EEM

[1693] Yingjun Wu, Joy Arulraj, Jiexi Lin, Ran Xian, and Andrew Pavlo. An empirical evaluation of in-memory multi-version concurrency control. *Proceedings of the VLDB Endowment*, 10(7):781–792, March 2017. CODEN ???? ISSN 2150-8097.

Wu:2017:FDH

[1694] You Wu, Junyang Gao, Pankaj K. Agarwal, and Jun Yang. Finding diverse, high-value representatives on a surface of answers. *Proceedings of the VLDB Endowment*, 10(7):793–804, March 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:RTI

[1695] Yanhao Wang, Qi Fan, Yuchen Li, and Kian-Lee Tan. Real-time influence maximization on dynamic social streams. *Proceedings of the VLDB Endowment*, 10(7):805–816, March 2017. CODEN ???? ISSN 2150-8097.

Cai:2017:CDC

[1696] Hongyun Cai, Vincent W. Zheng, Fanwei Zhu, Kevin Chen-Chuan Chang, and Zi Huang. From community detection to community profiling. *Proceedings of the VLDB Endowment*, 10 (7):817–828, March 2017. CODEN ???? ISSN 2150-8097.

Jain:2017:UWD

[1697] Ayush Jain, Akash Das Sarma, Aditya Parameswaran, and Jennifer Widom. Understanding workers, developing effective tasks, and enhancing marketplace dynamics: a study of a large crowdsourcing marketplace. *Proceedings of the VLDB Endowment*, 10(7): 829–840, March 2017. CODEN ???? ISSN 2150-8097.

Lin:2017:OPE

[1698] Xuelian Lin, Shuai Ma, Han Zhang, Tianyu Wo, and Jinpeng Huai. One-pass error bounded trajectory simplification. *Proceedings of the VLDB Endowment*, 10(7):841–852, March 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:MIL

[1699] Jianguo Wang, Chunbin Lin, Ruining He, Moojin Chae, Yannis Papakonstantinou, and Steven Swanson. MILC: inverted list compression in memory. *Proceedings of the VLDB Endowment*, 10(8):853–864, April 2017. CODEN ???? ISSN 2150-8097.

Huang:2017:CDD

[1700] Botong Huang and Jun Yang. Cümülön-D: data analytics in a dynamic spot market. *Proceedings of the VLDB Endowment*, 10(8):865–876, April 2017. CODEN ???? ISSN 2150-8097.

Then:2017:AAT

[1701] Manuel Then, Timo Kersten, Stephan Günnemann, Alfons Kemper, and Thomas Neumann. Automatic algorithm transformation for efficient multi-snapshot analytics on temporal graphs. *Proceedings of the VLDB Endowment*, 10(8):877–888, April 2017. CODEN ???? ISSN 2150-8097.

Zhu:2017:LAM

[1702] Jianqiao Zhu, Navneet Potti, Saket Saurabh, and Jignesh M. Patel. Looking ahead makes query plans robust: making the initial case with in-memory star schema data warehouse workloads. *Proceedings of the VLDB Endowment*, 10(8):889–900, April 2017. CODEN ???? ISSN 2150-8097.

Anderson:2017:BGB

[1703] Michael Anderson, Shaden Smith, Narayanan Sundaram, Mihai Capota, Zheguang Zhao, Subramanya Dulloor, Nadathur Satish, and Theodore L. Willke. Bridging the gap between HPC and big data frameworks. *Proceedings of the VLDB Endowment*, 10(8):901–912, April 2017. CODEN ???? ISSN 2150-8097.

Huang:2017:RSS

[1704] Keke Huang, Sibo Wang, Glenn Bevilacqua, Xiaokui Xiao, and Laks

V. S. Lakshmanan. Revisiting the stop-and-stare algorithms for influence maximization. *Proceedings of the VLDB Endowment*, 10(9):913–924, May 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:LSR

[1705] Xubo Wang, Lu Qin, Xuemin Lin, Ying Zhang, and Lijun Chang. Leveraging set relations in exact set similarity join. *Proceedings of the VLDB Endowment*, 10(9):925–936, May 2017. CODEN ???? ISSN 2150-8097.

Jiang:2017:RRW

[1706] Minhao Jiang, Ada Wai-Chee Fu, and Raymond Chi-Wing Wong. READS: a random walk approach for efficient and accurate dynamic SimRank. *Proceedings of the VLDB Endowment*, 10 (9):937–948, May 2017. CODEN ???? ISSN 2150-8097.

Huang:2017:ADC

[1707] Xin Huang and Laks V. S. Lakshmanan. Attribute-driven community search. *Proceedings of the VLDB Endowment*, 10(9):949–960, May 2017. CODEN ???? ISSN 2150-8097.

Chen:2017:BAS

[1708] Jiecao Chen and Qin Zhang. Bias-aware sketches. *Proceedings of the VLDB Endowment*, 10(9):961–972, May 2017. CODEN ???? ISSN 2150-8097.

Cao:2017:DDA

[1709] Yang Cao and Wenfei Fan. Data driven approximation with bounded resources. *Proceedings of the VLDB Endowment*, 10(9):973–984, May 2017. CODEN ???? ISSN 2150-8097.

Khayyat:2017:ELF

[1710] Zuhair Khayyat, William Lucia, Meghna Singh, Mourad Ouzzani, Paolo Papotti, Jorge-Arnulfo Quiané-Ruiz, Nan Tang, and Panos Kalnis. Errata for "Lightning Fast and Space Efficient Inequality Joins" (PVLDB 8(13): 2074–2085). *Proceedings of the VLDB Endowment*, 10(9):985, May 2017. CODEN ???? ISSN 2150-8097. See [1441].

Qin:2017:SAG

[1711] Chengjie Qin, Martin Torres, and Florin Rusu. Scalable asynchronous gradient descent optimization for out-of-core models. *Proceedings of the VLDB Endowment*, 10(10):986–997, June 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:WEM

[1712] Fan Zhang, Ying Zhang, Lu Qin, Wenjie Zhang, and Xuemin Lin. When engagement meets similarity: efficient (k, r)-core computation on social networks. *Proceedings of the VLDB Endowment*, 10(10):998–1009, June 2017. CODEN ???? ISSN 2150-8097.

Liu:2017:EEP

[1713] Yiding Liu, Tuan-Anh Nguyen Pham, Gao Cong, and Quan Yuan. An experimental evaluation of point-of-interest recommendation in location-based social networks. *Proceedings of the VLDB Endowment*, 10(10):1010–1021, June 2017. CODEN ???? ISSN 2150-8097.

Raasveldt:2017:DHM

[1714] Mark Raasveldt and Hannes Mühleisen. Don't hold my data hostage: a case for client protocol redesign. *Proceedings of the VLDB Endowment*, 10(10):

1022–1033, June 2017. CODEN ???? ISSN 2150-8097.

Zhu:2017:AJJ

[1715] Erkang Zhu, Yeye He, and Surajit Chaudhuri. Auto-join: joining tables by leveraging transformations. *Proceedings of the VLDB Endowment*, 10(10): 1034–1045, June 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:TSD

[1716] Aoqian Zhang, Shaoxu Song, Jianmin Wang, and Philip S. Yu. Time series data cleaning: from anomaly detection to anomaly repairing. *Proceedings of the VLDB Endowment*, 10(10): 1046–1057, June 2017. CODEN ???? ISSN 2150-8097.

Chen:2017:PBM

[1717] Lu Chen, Yunjun Gao, Baihua Zheng, Christian S. Jensen, Hanyu Yang, and Keyu Yang. Pivot-based metric indexing. *Proceedings of the VLDB Endowment*, 10(10):1058–1069, June 2017. CODEN ???? ISSN 2150-8097.

Guerraoui:2017:HRW

[1718] Rachid Guerraoui, Anne-Marie Kermarrec, Tao Lin, and Rhicheek Patra. Heterogeneous recommendations: what you might like to read after watching interstellar. *Proceedings of the VLDB Endowment*, 10(10):1070–1081, June 2017. CODEN ???? ISSN 2150-8097.

Deng:2017:SEM

[1719] Dong Deng, Albert Kim, Samuel Madden, and Michael Stonebraker. SilkMoth: an efficient method for finding related sets with maximum matching constraints. *Proceedings of the VLDB Endowment*, 10(10):1082–1093, June 2017. CODEN ???? ISSN 2150-8097.

Chung:2017:DQM

[1720] Yeounoh Chung, Sanjay Krishnan, and Tim Kraska. A data quality metric (DQM): how to estimate the number of undetected errors in data sets. *Proceedings of the VLDB Endowment*, 10(10): 1094–1105, June 2017. CODEN ???? ISSN 2150-8097.

Olma:2017:SCT

[1721] Matthaios Olma, Manos Karpathiotakis, Ioannis Alagiannis, Manos Athanassoulis, and Anastasia Ailamaki. Slalom: coasting through raw data via adaptive partitioning and indexing. *Proceedings of the VLDB Endowment*, 10(10):1106–1117, June 2017. CODEN ???? ISSN 2150-8097.

Li:2017:MFJ

[1722] Yinan Li, Nikos R. Katsipoulakis, Badrish Chandramouli, Jonathan Goldstein, and Donald Kossmann. Mison: a fast JSON parser for data analytics. *Proceedings of the VLDB Endowment*, 10(10):1118–1129, June 2017. CODEN ???? ISSN 2150-8097.

Huang:2017:OBV

[1723] Silu Huang, Liqi Xu, Jialin Liu, Aaron J. Elmore, and Aditya Parameswaran. OrpheusDB: bolt-on versioning for relational databases. *Proceedings of the VLDB Endowment*, 10(10):1130–1141, June 2017. CODEN ???? ISSN 2150-8097.

Galakatos:2017:RRA

[1724] Alex Galakatos, Andrew Crotty, Emanuel Zgraggen, Carsten Binnig, and Tim Kraska. Revisiting reuse for approximate query processing. *Proceedings of the VLDB Endowment*, 10 (10):1142–1153, June 2017. CODEN ???? ISSN 2150-8097.

Orr:2017:PDS

[1725] Laurel Orr, Magdalena Balazinska, and Dan Suciu. Probabilistic database summarization for interactive data exploration. *Proceedings of the VLDB Endowment*, 10(10):1154–1165, June 2017. CODEN ???? ISSN 2150-8097.

Oukid:2017:MMT

[1726] Ismail Oukid, Daniel Booss, Adrien Lespinasse, Wolfgang Lehner, Thomas Willhalm, and Grégoire Gomes. Memory management techniques for large-scale persistent-main-memory systems. *Proceedings of the VLDB Endowment*, 10(11):1166–1177, August 2017. CODEN ???? ISSN 2150-8097.

Shang:2017:TSJ

[1727] Shuo Shang, Lisi Chen, Zhewei Wei, Christian S. Jensen, Kai Zheng, and Panos Kalnis. Trajectory similarity join in spatial networks. *Proceedings of the VLDB Endowment*, 10(11):1178–1189, August 2017. CODEN ???? ISSN 2150-8097.

Rekatsinas:2017:HHD

[1728] Theodoros Rekatsinas, Xu Chu, Ihab F. Ilyas, and Christopher Ré. HoloClean: holistic data repairs with probabilistic inference. *Proceedings of the VLDB Endowment*, 10(11):1190–1201, August 2017. CODEN ???? ISSN 2150-8097.

Istvan:2017:CID

[1729] Zsolt István, David Sidler, and Gustavo Alonso. Caribou: intelligent distributed storage. *Proceedings of the VLDB Endowment*, 10(11):1202–1213, August 2017. CODEN ???? ISSN 2150-8097.

Chen:2017:TLA

[1730] Lingjiao Chen, Arun Kumar, Jeffrey Naughton, and Jignesh M. Patel. Towards linear algebra over normalized data. *Proceedings of the VLDB Endowment*, 10(11):1214–1225, August 2017. CODEN ???? ISSN 2150-8097.

Mehta:2017:CEB

[1731] Parmita Mehta, Sven Dorkenwald, Dongfang Zhao, Tomer Kaftan, Alvin Cheung, Magdalena Balazinska, Ariel Rokem, Andrew Connolly, Jacob Vanderplas, and Yusra AlSayyad. Comparative evaluation of big-data systems on scientific image analytics workloads. *Proceedings of the VLDB Endowment*, 10(11):1226–1237, August 2017. CODEN ???? ISSN 2150-8097.

Aslay:2017:RMI

[1732] Cigdem Aslay, Francesco Bonchi, Laks V. S. Lakshmanan, and Wei Lu. Revenue maximization in incentivized social advertising. *Proceedings of the VLDB Endowment*, 10(11):1238–1249, August 2017. CODEN ???? ISSN 2150-8097.

Rupprecht:2017:SNA

[1733] Lukas Rupprecht, William Culhane, and Peter Pietzuch. SquirrelJoin: network-aware distributed join processing with lazy partitioning. *Proceedings of the VLDB Endowment*, 10(11):1250–1261, August 2017. CODEN ???? ISSN 2150-8097.

Rahman:2017:ISE

[1734] Sajjadur Rahman, Maryam Aliakbarpour, Ha Kyung Kong, Eric Blais, Karrie Karahalios, Aditya Parameswaran, and Ronitt Rubinfield. I've seen "enough": incrementally improving visualizations to support rapid decision making. *Proceedings of the VLDB Endowment*, 10(11):1262–1273, August 2017. CODEN ???? ISSN 2150-8097.

Li:2017:MRT

[1735] Lei Li, Wen Hua, Xingzhong Du, and Xiaofang Zhou. Minimal on-road time route scheduling on time-dependent graphs. *Proceedings of the VLDB Endowment*, 10(11):1274–1285, August 2017. CODEN ???? ISSN 2150-8097.

Katsipoulakis:2017:HVS

[1736] Nikos R. Katsipoulakis, Alexandros Labrinidis, and Panos K. Chrysanthis. A holistic view of stream partitioning costs. *Proceedings of the VLDB Endowment*, 10(11):1286–1297, August 2017. CODEN ???? ISSN 2150-8097.

Akbas:2017:TBC

[1737] Esra Akbas and Peixiang Zhao. Truss-based community search: a truss-equivalence based indexing approach. *Proceedings of the VLDB Endowment*, 10(11):1298–1309, August 2017. CODEN ???? ISSN 2150-8097.

Cambronero:2017:QOD

[1738] José Cambronero, John K. Feser, Micah J. Smith, and Samuel Madden. Query optimization for dynamic imputation. *Proceedings of the VLDB Endowment*, 10(11):1310–1321, August 2017. CODEN ???? ISSN 2150-8097.

Marchant:2017:SER

[1739] Neil G. Marchant and Benjamin I. P. Rubinstein. In search of an entity resolution OASIS: optimal asymptotic sequential importance sampling. *Proceedings of the VLDB Endowment*, 10(11): 1322–1333, August 2017. CODEN ???? ISSN 2150-8097.

Tong:2017:FOT

[1740] Yongxin Tong, Libin Wang, Zimu Zhou, Bolin Ding, Lei Chen, Jieping Ye, and Ke Xu. Flexible online task assignment in real-time spatial data. *Proceedings of the VLDB Endowment*, 10 (11):1334–1345, August 2017. CODEN ???? ISSN 2150-8097.

Bouros:2017:FSB

[1741] Panagiotis Bouros and Nikos Mamoulis. A forward scan based plane sweep algorithm for parallel interval joins. *Proceedings of the VLDB Endowment*, 10 (11):1346–1357, August 2017. CODEN ???? ISSN 2150-8097.

Rong:2017:APA

[1742] Kexin Rong and Peter Bailis. ASAP: prioritizing attention via time series smoothing. *Proceedings of the VLDB Endowment*, 10(11):1358–1369, August 2017. CODEN ???? ISSN 2150-8097.

Li:2017:KVL

[1743] Furong Li, Xin Luna Dong, Anno Langen, and Yang Li. Knowledge verification for long-tail verticals. *Proceedings of the VLDB Endowment*, 10(11):1370–1381, August 2017. CODEN ???? ISSN 2150-8097.

Pande:2017:SRR

[1744] Shiladitya Pande, Sayan Ranu, and Arnab Bhattacharya. SkyGraph: retrieving regions of interest using skyline subgraph queries. *Proceedings of the VLDB Endowment*, 10(11):1382–1393, August 2017. CODEN ???? ISSN 2150-8097.

Tan:2017:REA

[1745] Wei Chit Tan, Meihui Zhang, Hazem Elmeleegy, and Divesh Srivastava. Reverse engineering aggregation queries. *Proceedings of the VLDB Endowment*, 10(11):1394–1405, August 2017. CODEN ???? ISSN 2150-8097.

Yut:2017:LRL

[1746] Lele Yut, Ce Zhang, Yingxia Shao, and Bin Cui. LDA*: a robust and large-scale topic modeling system. *Proceedings of the VLDB Endowment*, 10(11): 1406–1417, August 2017. CODEN ???? ISSN 2150-8097.

Kabiljo:2017:SHP

[1747] Igor Kabiljo, Brian Karrer, Mayank Pundir, Sergey Pupyrev, and Alon Shalita. Social hash partitioner: a scalable distributed hypergraph partitioner. *Proceedings of the VLDB Endowment*, 10(11):1418–1429, August 2017. CODEN ???? ISSN 2150-8097.

Ahmed:2017:SMG

[1748] Nesreen K. Ahmed, Nick Duffield, Theodore L. Willke, and Ryan A. Rossi. On sampling from massive graph streams. *Proceedings of the VLDB Endowment*, 10(11):1430–1441, August 2017. CODEN ???? ISSN 2150-8097.

Yang:2017:PSS

[1749] Tong Yang, Yang Zhou, Hao Jin, Shigang Chen, and Xiaoming Li. Pyramid sketch: a sketch framework for frequency estimation of data streams. *Proceedings of the VLDB Endowment*, 10(11):1442–1453, August 2017. CODEN ???? ISSN 2150-8097.

Ciaccia:2017:RSR

[1750] Paolo Ciaccia and Davide Martinenghi. Reconciling skyline and ranking queries. *Proceedings of the VLDB Endowment*, 10(11):1454–1465, August 2017. CODEN ???? ISSN 2150-8097.

Giannakopoulou:2017:COQ

[1751] Stella Giannakopoulou, Manos Karpathiotakis, Benjamin Gaidioz, and Anastasia Ailamaki. CleanM: an optimizable query language for unified scale-out data cleaning. *Proceedings of the VLDB Endowment*, 10(11):1466–1477, August 2017. CODEN ???? ISSN 2150-8097.

Xie:2017:DTS

[1752] Dong Xie, Feifei Li, and Jeff M. Phillips. Distributed trajectory similarity search. *Proceedings of the VLDB Endowment*, 10(11):1478–1489, August 2017. CODEN ???? ISSN 2150-8097.

Chandra:2017:ROJ

[1753] Bikash Chandra and S. Sudarshan. Runtime optimization of join location in parallel data management systems. *Proceedings of the VLDB Endowment*, 10(11):1490–1501, August 2017. CODEN ???? ISSN 2150-8097.

Lehmberg:2017:SWT

[1754] Oliver Lehmberg and Christian Bizer. Stitching web tables for improving matching quality. *Proceedings of the VLDB Endowment*, 10(11):1502–1513, August 2017. CODEN ???? ISSN 2150-8097.

Shekelyan:2017:DHB

[1755] Michael Shekelyan, Anton Dignös, and Johann Gamper. DigitHist: a histogram-based data summary with tight error bounds. *Proceedings of the VLDB Endowment*, 10(11):1514–1525, August 2017. CODEN ???? ISSN 2150-8097.

Pilman:2017:FSK

[1756] Markus Pilman, Kevin Bocksrocker, Lucas Braun, Renato Marroquín, and Donald Kossmann. Fast scans on key–value stores. *Proceedings of the VLDB Endowment*, 10(11):1526–1537, August 2017. CODEN ???? ISSN 2150-8097.

Lu:2017:FMC

[1757] Can Lu, Jeffrey Xu Yu, Hao Wei, and Yikai Zhang. Finding the maximum clique in massive graphs. *Proceedings of the VLDB Endowment*, 10(11):1538–1549, August 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:PPN

[1758] Yuankai Zhang, Adam O'Neill, Micah Sherr, and Wenchao Zhou. Privacy-preserving network provenance. *Proceedings of the VLDB Endowment*, 10 (11):1550–1561, August 2017. CODEN ???? ISSN 2150-8097.

Garcia-Ulloa:2017:TDS

[1759] Daniel A. Garcia-Ulloa, Li Xiong, and Vaidy Sunderam. Truth discovery for spatio-temporal events from crowd-sourced data. *Proceedings of the VLDB Endowment*, 10(11):1562–1573, August 2017. CODEN ???? ISSN 2150-8097.

Trummer:2017:DVO

[1760] Immanuel Trummer, Jiancheng Zhu, and Mark Bryan. Data vocalization: optimizing voice output of relational data. *Proceedings of the VLDB Endowment*, 10(11):1574–1585, August 2017. CODEN ???? ISSN 2150-8097.

Kang:2017:NON

[1761] Daniel Kang, John Emmons, Firas Abuzaid, Peter Bailis, and Matei Zaharia. NoScope: optimizing neural network queries over video at scale. *Proceedings of the VLDB Endowment*, 10 (11):1586–1597, August 2017. CODEN ???? ISSN 2150-8097.

Lee:2017:PRA

[1762] Juchang Lee, SeungHyun Moon, Kyu Hwan Kim, Deok Hoe Kim, Sang Kyun Cha, and Wook-Shin Han. Parallel replication across formats in SAP HANA for scaling out mixed OLTP/OLAP workloads. *Proceedings of the VLDB Endowment*, 10(12):1598–1609, August 2017. CODEN ???? ISSN 2150-8097.

Shamsuddin:2017:DLD

[1763] Rittika Shamsuddin, Amit Sawant, and Balakrishnan Prabhakaran. Developing a low dimensional patient class profile in accordance to their respiration-induced tumor motion. *Proceedings of the VLDB Endowment*, 10(12):1610–1621, August 2017. CODEN ???? ISSN 2150-8097.

Ziauddin:2017:DBD

[1764] Mohamed Ziauddin, Andrew Witkowski, You Jung Kim, Dmitry Potapov, Janaki Lahorani, and Murali Krishna. Dimensions based data clustering and zone maps. *Proceedings of the VLDB Endowment*, 10(12):1622–1633, August 2017. CODEN ???? ISSN 2150-8097.

Noghabi:2017:SSS

[1765] Shadi A. Noghabi, Kartik Paramasivam, Yi Pan, Navina Ramesh, Jon Bringhurst, Indranil Gupta, and Roy H. Campbell. Samza: stateful scalable stream processing at LinkedIn. *Proceedings of the VLDB Endowment*, 10(12):1634–1645, August 2017. CODEN ???? ISSN 2150-8097.

Falk:2017:QAK

[1766] Eric Falk, Vijay K. Gurbani, and Radu State. Query-able Kafka: an agile data analytics pipeline for mobile wireless networks. *Proceedings of the VLDB Endowment*, 10(12):1646–1657, August 2017. CODEN ???? ISSN 2150-8097.

Nica:2017:SDS

[1767] Anisoara Nica, Reza Sherkat, Mihnea Andrei, Xun Cheng, Martin Heidel, Christian Bensberg, and Heiko Gerwens. Statisticum: data statistics management in SAP HANA. *Proceedings of the VLDB Endowment*, 10(12):1658–1669, August 2017. CODEN ???? ISSN 2150-8097.

Gessert:2017:QQW

[1768] Felix Gessert, Michael Schaarschmidt, Wolfram Wingerath, Erik Witt, Eiko Yoneki, and Norbert Ritter. Quaestor: query web caching for database-as-a-service providers. *Proceedings of the VLDB Endowment*, 10(12):1670–1681, August 2017. CODEN ???? ISSN 2150-8097.

Gasiunas:2017:FBA

[1769] Vaidas Gasiunas, David Dominguez-Sal, Ralph Acker, Aharon Avitzur, Ilan Bronshtein, Rushan Chen, Eli Ginot, Norbert Martinez-Bazan, Michael Müller, Alexander Nozdrin, Weijie Ou, Nir Pachter, Dima Sivov, and Eliezer Levy. Fiber-based architecture for NFV cloud databases. *Proceedings of the VLDB Endowment*, 10(12):1682–1693, August 2017. CODEN ???? ISSN 2150-8097.

Bose:2017:PDF

[1770] Joos-Hendrik Böse, Valentin Flunkert, Jan Gasthaus, Tim Januschowski, Dustin Lange, David Salinas, Sebastian Schelter, Matthias Seeger, and Yuyang Wang. Probabilistic demand forecasting at scale. *Proceedings of the VLDB Endowment*, 10(12):1694–1705, August 2017. CODEN ???? ISSN 2150-8097.

Lee:2017:EBG

[1771] Jinho Lee, Heesu Kim, Sungjoo Yoo, Kiyoung Choi, H. Peter Hofstee, Gi-Joon Nam, Mark R. Nutter, and Damir Jamsek. ExtraV: boosting graph processing near storage with a coherent accelerator. *Proceedings of the VLDB Endowment*, 10(12):1706–1717, August 2017. CODEN ???? ISSN 2150-8097.

Carbone:2017:SMA

[1772] Paris Carbone, Stephan Ewen, Gyula Fóra, Seif Haridi, Stefan Richter, and Kostas Tzoumas. State management in Apache Flink(R): consistent stateful distributed stream processing. *Proceedings of the VLDB Endowment*, 10(12): 1718–1729, August 2017. CODEN ???? ISSN 2150-8097.

Zheng:2017:PHA

[1773] Jianjun Zheng, Qian Lin, Jiatao Xu, Cheng Wei, Chuwei Zeng, Pingan Yang, and Yunfan Zhang. PaxosStore: high-availability storage made practical in WeChat. *Proceedings of the VLDB*

Endowment, 10(12):1730–1741, August 2017. CODEN ???? ISSN 2150-8097.

Antonopoulos:2017:ROI

[1774] Panagiotis Antonopoulos, Hanuma Kodavalla, Alex Tran, Nitish Upreti, Chaitali Shah, and Mirek Sztajno. Resumable online index rebuild in SQL server. *Proceedings of the VLDB Endowment*, 10(12):1742–1753, August 2017. CODEN ???? ISSN 2150-8097.

Andrei:2017:SHA

[1775] Mihnea Andrei, Christian Lemke, Günter Radestock, Robert Schulze, Carsten Thiel, Rolando Blanco, Akanksha Meghlan, Muhammad Sharique, Sebastian Seifert, Surendra Vishnoi, Daniel Booss, Thomas Peh, Ivan Schreter, Werner Thesing, Mehul Wagle, and Thomas Willhalm. SAP HANA adoption of non-volatile memory. *Proceedings of the VLDB Endowment*, 10(12):1754–1765, August 2017. CODEN ???? ISSN 2150-8097.

Zhang:2017:CIS

[1776] Mingming Zhang, Tianyu Wo, Tao Xie, Xuelian Lin, and Yaxiao Liu. CarStream: an industrial system of big data processing for Internet-of-Vehicles. *Proceedings of the VLDB Endowment*, 10(12):1766–1777, August 2017. CODEN ???? ISSN 2150-8097.

Bonetta:2017:FJF

[1777] Daniele Bonetta and Matthias Brantner. FAD.js: fast JSON data access using JIT-based speculative optimizations. *Proceedings of the VLDB Endowment*, 10(12):1778–1789, August 2017. CODEN ???? ISSN 2150-8097.

Aggour:2017:CCL

[1778] Kareem S. Aggour, Jenny Weisenberg Williams, Justin McHugh, and Vijay S. Kumar. Colt: concept lineage tool for data flow metadata capture and analysis. *Proceedings of the VLDB Endowment*, 10(12):1790–1801, August 2017. CODEN ???? ISSN 2150-8097.

Yeh:2017:MPI

[1779] Chin-Chia Michael Yeh, Nickolas Kavantzas, and Eamonn Keogh. Matrix profile IV: using weakly labeled time series to predict outcomes. *Proceedings of the VLDB Endowment*, 10(12):1802–1812, August 2017. CODEN ???? ISSN 2150-8097.

Chakkappen:2017:ASO

[1780] Sunil Chakkappen, Suratna Budalakoti, Ramarajan Krishnamachari, Satyanarayana R. Valluri, Alan Wood, and Mohamed Zait. Adaptive statistics in Oracle 12c. *Proceedings of the VLDB Endowment*, 10(12):1813–1824, August 2017. CODEN ???? ISSN 2150-8097.

Floratou:2017:DSR

[1781] Avrilia Floratou, Ashvin Agrawal, Bill Graham, Sriram Rao, and Karthik Ramasamy. Dhalion: self-regulating stream processing in Heron. *Proceedings of the VLDB Endowment*, 10(12): 1825–1836, August 2017. CODEN ???? ISSN 2150-8097.

Zhu:2017:INO

[1782] Erkang Zhu, Ken Q. Pu, Fatemeh Nargesian, and Renée J. Miller. Interactive navigation of open data linkages. *Proceedings of the VLDB Endowment*, 10 (12):1837–1840, August 2017. CODEN ???? ISSN 2150-8097.

Pimentel:2017:NTC

[1783] João Felipe Pimentel, Leonardo Murta, Vanessa Braganholo, and Juliana Freire. noWorkflow: a tool for collecting, analyzing, and managing provenance from Python scripts. *Proceedings of the VLDB Endowment*, 10(12): 1841–1844, August 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:ACB

[1784] Chao Wang, Yihao Feng, Qi Guo, Zhaoxian Li, Kexin Liu, Zijian Tang, Anthony K. H. Tung, Lifu Wu, and Yuxin Zheng. ARShop: a cloud-based augmented reality system for shopping. *Proceedings of the VLDB Endowment*, 10(12):1845–1848, August 2017. CODEN ???? ISSN 2150-8097.

Aberger:2017:MGB

[1785] Christopher R. Aberger, Andrew Lamb, Kunle Olukotun, and Christopher Ré. Mind the gap: bridging multi-domain query workloads with EmptyHeaded. *Proceedings of the VLDB Endowment*, 10(12):1849–1852, August 2017. CODEN ???? ISSN 2150-8097.

Maccioni:2017:CFL

[1786] Antonio Maccioni and Riccardo Torlone. Crossing the finish line faster when paddling the data lake with KAYAK. *Proceedings of the VLDB Endowment*, 10(12):1853–1856, August 2017. CODEN ???? ISSN 2150-8097.

Niu:2017:DTT

[1787] Xing Niu, Bahareh Sadat Arab, Seokki Lee, Su Feng, Xun Zou, Dieter Gawlick, Vasudha Krishnaswamy, Zhen Hua Liu, and Boris Glavic. Debugging transactions and tracking their provenance with reenactment. *Proceedings of the VLDB Endowment*, 10(12):1857–1860, August 2017. CODEN ???? ISSN 2150-8097.

Huang:2017:PES

[1788] Kai Huang, Sourav S. Bhowmick, Shuigeng Zhou, and Byron Choi. `picasso`: exploratory search of connected subgraph substructures in graph databases. *Proceedings of the VLDB Endowment*, 10(12):1861–1864, August 2017. CODEN ???? ISSN 2150-8097.

Cai:2017:DDI

[1789] Ruichu Cai, Zijie Lu, Li Wang, Zhenjie Zhang, Tom Z. J. Fur, and Marianne Winslett. DITIR: distributed index for high throughput trajectory insertion and real-time temporal range query. *Proceedings of the VLDB Endowment*, 10(12):1865–1868, August 2017. CODEN ???? ISSN 2150-8097.

Pang:2017:FIV

[1790] Zhifei Pang, Sai Wu, Gang Chen, Ke Chen, and Lidan Shou. FlashView: an interactive visual explorer for raw data. *Proceedings of the VLDB Endowment*, 10(12):1869–1872, August 2017. CODEN ???? ISSN 2150-8097.

Subercaze:2017:UPT

[1791] Julien Subercaze, Christophe Gravier, Syed Gillani, Abderrahmen Kammoun, and Frédérique Laforest. Upsortable: programming top-k queries over data streams. *Proceedings of the VLDB Endowment*, 10(12):1873–1876, August 2017. CODEN ???? ISSN 2150-8097.

Chamanara:2017:QSH

[1792] Javad Chamanara, Birgitta König-Ries, and H. V. Jagadish. QUIS: in-situ heterogeneous data source querying. *Proceedings of the VLDB Endowment*, 10(12):1877–1880, August 2017. CODEN ???? ISSN 2150-8097.

Alawini:2017:ADC

[1793] Abdussalam Alawini, Susan B. Davidson, Wei Hu, and Yinjun Wu. Automating data citation in CiteDB. *Proceedings of the VLDB Endowment*, 10 (12):1881–1884, August 2017. CODEN ???? ISSN 2150-8097.

Fang:2017:CEB

[1794] Yixiang Fang, Reynold Cheng, Siqiang Luo, Jiafeng Hu, and Kai Huang. C-explorer: browsing communities in large graphs. *Proceedings of the VLDB Endowment*, 10(12):1885–1888, August 2017. CODEN ???? ISSN 2150-8097.

Fan:2017:GPS

[1795] Wenfei Fan, Jingbo Xu, Yinghui Wu, Wenyuan Yu, and Jiaxin Jiang. GRAPE: parallelizing sequential graph computations. *Proceedings of the VLDB Endowment*, 10(12):1889–1892, August 2017. CODEN ???? ISSN 2150-8097.

Khoshkbarforoushha:2017:FDA

[1796] Alireza Khoshkbarforoushha, Rajiv Ranjan, Qing Wang, and Carsten Friedrich. Flower: a data analytics flow elasticity manager. *Proceedings of the VLDB Endowment*, 10(12):1893–1896, August 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:SAD

[1797] Zhiyi Wang, Dongyan Zhou, and Shimin Chen. STEED: an analytical database system for tree-structured data. *Proceedings of the VLDB Endowment*, 10(12):1897–1900, August 2017. CODEN ???? ISSN 2150-8097.

Xiao:2017:LLC

[1798] Yonghui Xiao, Li Xiong, Si Zhang, and Yang Cao. LocLok: location cloaking with differential privacy via hidden Markov model. *Proceedings of the VLDB Endowment*, 10(12):1901–1904, August 2017. CODEN ???? ISSN 2150-8097.

Ren:2017:SAI

[1799] Xiangnan Ren, Olivier Curé, Li Ke, Jeremy Lhez, Badre Belabbess, Tendry Randriamalala, Yufan Zheng, and Gabriel Kepeklian. Strider: an adaptive, inference-enabled distributed RDF stream processing engine. *Proceedings of the VLDB Endowment*, 10 (12):1905–1908, August 2017. CODEN ???? ISSN 2150-8097.

Li:2017:CAT

[1800] Yan Li, Ngai Meng Kou, Hao Wang, Leong Hou U., and Zhiguo Gong. A confidence-aware top-k query processing toolkit on crowdsourcing. *Proceedings of the VLDB Endowment*, 10(12): 1909–1912, August 2017. CODEN ???? ISSN 2150-8097.

Fionda:2017:EQK

[1801] Valeria Fionda and Giuseppe Pirrò. Explaining and querying knowledge graphs by relatedness. *Proceedings of the VLDB Endowment*, 10(12):1913–1916, August 2017. CODEN ???? ISSN 2150-8097.

Kunjir:2017:TAM

[1802] Mayuresh Kunjir and Shivnath Babu. Thoth in action: memory management in modern data analytics. *Proceedings of the VLDB Endowment*, 10(12):1917–1920, August 2017. CODEN ???? ISSN 2150-8097.

Schule:2017:MSS

[1803] Maximilian E. Schüle, Pascal M. N. Schliski, Thomas Hutzelmann, Tobias Rosenberger, Viktor Leis, Dimitri Vorona, Alfons Kemper, and Thomas Neumann. Monopedia: staying single is good enough — the hyper way for web scale applications. *Proceedings of the VLDB Endowment*, 10(12):1921–1924, August 2017. CODEN ???? ISSN 2150-8097.

Sun:2017:DDM

[1804] Ji Sun, Zeyuan Shang, Guoliang Li, Dong Deng, and Zhifeng Bao. Dima: a distributed in-memory similarity-based query processing system. *Proceedings of the VLDB Endowment*, 10(12):1925–1928, August 2017. CODEN ???? ISSN 2150-8097.

Chekol:2017:TTC

[1805] Melisachew W. Chekol, Giuseppe Pirrò, Joerg Schoenfisch, and Heiner Stuckenschmidt. TeCoRe: temporal conflict resolution in knowledge graphs. *Proceedings of the VLDB Endowment*, 10(12):1929–1932, August 2017. CODEN ???? ISSN 2150-8097.

Li:2017:MTD

[1806] Xupeng Li, Bin Cui, Yiru Chen, Wentao Wu, and Ce Zhang. MLog: towards declarative in-database machine learning. *Proceedings of the VLDB Endowment*, 10(12):1933–1936, August 2017. CODEN ???? ISSN 2150-8097.

Demiralp:2017:FRV

[1807] Çagatay Demiralp, Peter J. Haas, Srinivasan Parthasarathy, and Tejaswini Pedapati. Foresight: recommending visual insights. *Proceedings of the VLDB Endowment*, 10(12):1937–1940, August 2017. CODEN ???? ISSN 2150-8097.

Jacobs:2017:BDT

[1808] Steven Jacobs, Md Yusuf Sarwar Uddin, Michael Carey, Vagelis Hristidis, Vassilis J. Tsotras, N. Venkatasubramanian, Yao Wu, Syed Safir, Purvi Kaul, Xikui Wang, Mohiuddin Abdul Qader, and Yawei Li. A BAD demonstration: towards Big Active Data. *Proceedings of the VLDB Endowment*, 10(12):1941–1944, August 2017. CODEN ???? ISSN 2150-8097.

Hassan:2017:CFE

[1809] Naeemul Hassan, Gensheng Zhang, Fatma Arslan, Josue Caraballo, Damian Jimenez, Siddhant Gawsane, Shohedul Hasan, Minumol Joseph, Aaditya Kulkarni, Anil Kumar Nayak, Vikas Sable, Chengkai Li, and Mark Tremayne. ClaimBuster: the first-ever end-to-end fact-checking system. *Proceedings of the VLDB Endowment*, 10 (12):1945–1948, August 2017. CODEN ???? ISSN 2150-8097.

Deep:2017:QDR

[1810] Shaleen Deep, Paraschos Koutris, and Yash Bidasaria. QIRANA demonstration: real time scalable query pricing. *Proceedings of the VLDB Endowment*, 10(12):1949–1952, August 2017. CODEN ???? ISSN 2150-8097.

Khan:2017:DDT

[1811] Meraj Khan, Larry Xu, Arnab Nandi, and Joseph M. Hellerstein. DataTweener: a demonstration of a tweening engine for incremental visualization of data transforms. *Proceedings of the VLDB Endowment*, 10(12): 1953–1956, August 2017. CODEN ???? ISSN 2150-8097.

Salimi:2017:ZCI

[1812] Babak Salimi, Corey Cole, Dan R. K. Ports, and Dan Suciu. ZaliQL: causal inference from observational data at scale. *Proceedings of the VLDB Endowment*, 10(12):1957–1960, August 2017. CODEN ???? ISSN 2150-8097.

Alarabi:2017:DSH

[1813] Louai Alarabi and Mohamed F. Mokbel. A demonstration of ST-Hadoop: a MapReduce framework for big spatio-temporal data. *Proceedings of the VLDB Endowment*, 10(12):1961–1964, August 2017. CODEN ???? ISSN 2150-8097.

Bharadwaj:2017:CIL

[1814] S. Bharadwaj, L. Chiticariu, M. Danilevsky, S. Dhingra, S. Divekar, A. Carreno-Fuentes, H. Gupta, N. Gupta, S.-D. Han, M. Hernández, H. Ho, P. Jain, S. Joshi, H. Karanam, S. Krishnan, R. Krishnamurthy, Y. Li, S. Manivannan, A. Mittal, F. Özcan, A. Quamar, P. Raman, D. Saha, K. Sankaranarayanan, J. Sen, P. Sen, S. Vaithyanathan, M. Vasa, H. Wang, and H. Zhu. Creation and interaction with large-scale domain-specific knowledge bases. *Proceedings of the VLDB Endowment*, 10(12):1965–1968, August 2017. CODEN ???? ISSN 2150-8097.

Jonathan:2017:DSC

[1815] Christopher Jonathan and Mohamed F. Mokbel. A demonstration of Stella: a crowdsourcing-based geotagging framework. *Proceedings of the VLDB Endowment*, 10(12):1969–1972, August 2017. CODEN ???? ISSN 2150-8097.

Moll:2017:EBV

[1816] Oscar Moll, Aaron Zalewski, Sudeep Pillai, Sam Madden, Michael Stonebraker, and Vijay Gadepally. Exploring big volume sensor data with Vroom. *Proceedings of the VLDB Endowment*, 10(12):1973–1976, August 2017. CODEN ???? ISSN 2150-8097.

Mottin:2017:NTE

[1817] Davide Mottin, Matteo Lissandrini, Yannis Velegrakis, and Themis Palpanas. New trends on exploratory methods for data analytics. *Proceedings of the VLDB Endowment*, 10(12): 1977–1980, August 2017. CODEN ???? ISSN 2150-8097.

Khan:2017:SSD

[1818] Arijit Khan, Sourav S. Bhowmick, and Francesco Bonchi. Summarizing static and dynamic big graphs. *Proceedings of the VLDB Endowment*, 10(12):1981–1984, August 2017. CODEN ???? ISSN 2150-8097.

Mouratidis:2017:GAT

[1819] Kyriakos Mouratidis. Geometric approaches for top-k queries. *Proceedings of the VLDB Endowment*, 10(12):1985–1987, August 2017. CODEN ???? ISSN 2150-8097.

Tong:2017:SCC

[1820] Yongxin Tong, Lei Chen, and Cyrus Shahabi. Spatial crowdsourcing: challenges, techniques, and applications. *Proceedings of the VLDB Endowment*, 10(12):1988–1991, August 2017. CODEN ???? ISSN 2150-8097.

Eldawy:2017:EBS

[1821] Ahmed Eldawy and Mohamed F. Mokbel. The era of big spatial data. *Proceedings of the VLDB Endowment*, 10 (12):1992–1995, August 2017. CODEN ???? ISSN 2150-8097.

Giatrakos:2017:CER

[1822] Nikos Giatrakos, Alexander Artikis, Antonios Deligiannakis, and Minos Garofalakis. Complex event recognition in the big data era. *Proceedings of the VLDB Endowment*, 10(12):1996–1999, August 2017. CODEN ???? ISSN 2150-8097.

Mohan:2017:TBD

[1823] C. Mohan. Tutorial: blockchains and databases. *Proceedings of the VLDB Endowment*, 10(12):2000–2001, August 2017. CODEN ???? ISSN 2150-8097.

Zakhary:2017:CWS

[1824] Victor Zakhary, Divyakant Agrawal, and Amr El Abbadi. Caching at the web scale. *Proceedings of the VLDB Endowment*, 10(12):2002–2005, August 2017. CODEN ???? ISSN 2150-8097.

Li:2017:HLD

[1825] Guoliang Li. Human-in-the-loop data integration. *Proceedings of the VLDB Endowment*, 10(12):2006–2017, August 2017. CODEN ???? ISSN 2150-8097.

Lehner:2017:DCU

[1826] Wolfgang Lehner. The data center under your desk: how disruptive is modern hardware for DB system design? *Proceedings of the VLDB Endowment*, 10(12):2018–2019, August 2017. CODEN ???? ISSN 2150-8097.

Milo:2017:SMM

[1827] Tova Milo. 7 secrets that my mother didn't tell me. *Proceedings of the VLDB Endowment*, 10(12):2020, August 2017. CODEN ???? ISSN 2150-8097.

Lv:2017:IPL

[1828] Qin Lv, William Josephson, Zhe Wang, Moses Charikar, and Kai Li. Intelligent probing for locality sensitive hashing: multi-probe LSH and beyond. *Proceedings of the VLDB Endowment*, 10(12): 2021–2024, August 2017. CODEN ???? ISSN 2150-8097.

Qin:2017:SRB

[1829] Dai Qin, Angela Demke Brown, and Ashvin Goel. Scalable replay-based replication for fast databases. *Proceedings of the VLDB Endowment*, 10(13): 2025–2036, September 2017. CODEN ???? ISSN 2150-8097.

Ren:2017:SSE

[1830] Kai Ren, Qing Zheng, Joy Arulraj, and Garth Gibson. SlimDB: a space-efficient key–value storage engine for semi-sorted data. *Proceedings of the VLDB Endowment*, 10(13):2037–2048, September 2017. CODEN ???? ISSN 2150-8097.

Abdelaziz:2017:SEC

[1831] Ibrahim Abdelaziz, Razen Harbi, Zuhair Khayyat, and Panos Kalnis. A survey and experimental comparison of distributed SPARQL engines for very large RDF data. *Proceedings of the VLDB Endowment*, 10(13):2049–2060, September 2017. CODEN ???? ISSN 2150-8097.

Kunft:2017:BEM

[1832] Andreas Kunft, Asterios Katsifodimos, Sebastian Schelter, Tilmann Rabl, and Volker Markl. Blockjoin: efficient matrix partitioning through joins. *Proceedings of the VLDB Endowment*, 10 (13):2061–2072, September 2017. CODEN ???? ISSN 2150-8097.

Choi:2017:EMR

[1833] Dong-Wan Choi, Jian Pei, and Thomas Heinis. Efficient mining of regional movement patterns in semantic trajectories. *Proceedings of the VLDB Endowment*, 10(13):2073–2084, September 2017. CODEN ???? ISSN 2150-8097.

Kiefer:2017:EJS

[1834] Martin Kiefer, Max Heimel, Sebastian Breß, and Volker Markl. Estimating join selectivities using bandwidth-optimized kernel density models. *Proceedings of the VLDB Endowment*, 10 (13):2085–2096, September 2017. CODEN ???? ISSN 2150-8097.

Menon:2017:ROF

[1835] Prashanth Menon, Todd C. Mowry, and Andrew Pavlo. Relaxed operator fusion for in-memory databases: making compilation, vectorization, and prefetching work together at last. *Proceedings of the VLDB Endowment*, 11 (1):1–13, September 2017. CODEN ???? ISSN 2150-8097.

Liu:2017:PSS

[1836] Yu Liu, Bolong Zheng, Xiaodong He, Zhewei Wei, Xiaokui Xiao, Kai Zheng, and Jiaheng Lu. Probesim: scalable single-source and top-k SimRank computations on dynamic graphs. *Proceedings of the VLDB Endowment*, 11(1): 14–26, September 2017. CODEN ???? ISSN 2150-8097.

Guagliardo:2017:FSS

[1837] Paolo Guagliardo and Leonid Libkin. A formal semantics of SQL queries, its validation, and applications. *Proceedings of the VLDB Endowment*, 11(1): 27–39, September 2017. CODEN ???? ISSN 2150-8097.

Kim:2017:EHS

[1838] Jinhyun Kim, Jun-Ki Min, and Kyuseok Shim. Efficient Haar$^+$ synopsis construction for the maximum absolute error measure. *Proceedings of the VLDB Endowment*, 11(1):40–52, September 2017. CODEN ???? ISSN 2150-8097.

Tao:2017:ASJ

[1839] Wenbo Tao, Dong Deng, and Michael Stonebraker. Approximate string joins with abbreviations. *Proceedings of the VLDB Endowment*, 11(1):53–65, September 2017. CODEN ???? ISSN 2150-8097.

Nguyen:2017:QDF

[1840] Dat Ba Nguyen, Abdalghani Abujabal, Nam Khanh Tran, Martin Theobald, and Gerhard Weikum. Query-driven on-the-fly knowledge base construction. *Proceedings of the VLDB Endowment*, 11(1):66–79, September 2017. CODEN ???? ISSN 2150-8097.

Poppe:2017:GGB

[1841] Olga Poppe, Chuan Lei, Elke A. Rundensteiner, and David Maier. GRETA:

graph-based real-time event trend aggregation. *Proceedings of the VLDB Endowment*, 11(1):80–92, September 2017. CODEN ???? ISSN 2150-8097.

Guo:2017:PPP

[1842] Wentian Guo, Yuchen Li, Mo Sha, and Kian-Lee Tan. Parallel Personalized PageRank on dynamic graphs. *Proceedings of the VLDB Endowment*, 11(1): 93–106, September 2017. CODEN ???? ISSN 2150-8097.

Sha:2017:ADG

[1843] Mo Sha, Yuchen Li, Bingsheng He, and Kian-Lee Tan. Accelerating dynamic graph analytics on GPUs. *Proceedings of the VLDB Endowment*, 11(1):107–120, September 2017. CODEN ???? ISSN 2150-8097.

Appuswamy:2017:AIS

[1844] Raja Appuswamy, Angelos C. Anadiotis, Danica Porobic, Mustafa K. Iman, and Anastasia Ailamaki. Analyzing the impact of system architecture on the scalability of OLTP engines for high-contention workloads. *Proceedings of the VLDB Endowment*, 11(2):121–134, October 2017. CODEN ???? ISSN 2150-8097.

Jung:2017:SDL

[1845] Hyungsoo Jung, Hyuck Han, and Sooyong Kang. Scalable database logging for multicores. *Proceedings of the VLDB Endowment*, 11(2):135–148, October 2017. CODEN ???? ISSN 2150-8097.

Bonifati:2017:ASL

[1846] Angela Bonifati, Wim Martens, and Thomas Timm. An analytical study of large SPARQL query logs. *Proceedings of the VLDB Endowment*, 11(2): 149–161, October 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:ACT

[1847] Pinghui Wang, Yiyan Qi, Yu Sun, Xiangliang Zhang, Jing Tao, and Xiaohong Guan. Approximately counting triangles in large graph streams including edge duplicates with a fixed memory usage. *Proceedings of the VLDB Endowment*, 11(2):162–175, October 2017. CODEN ???? ISSN 2150-8097.

Qiao:2017:SMC

[1848] Miao Qiao, Hao Zhang, and Hong Cheng. Subgraph matching: on compression and computation. *Proceedings of the VLDB Endowment*, 11(2):176–188, October 2017. CODEN ???? ISSN 2150-8097.

Singh:2017:SEM

[1849] Rohit Singh, Venkata Vamsikrishna Meduri, Ahmed Elmagarmid, Samuel Madden, Paolo Papotti, Jorge-Arnulfo Quiané-Ruiz, Armando Solar-Lezama, and Nan Tang. Synthesizing entity matching rules by examples. *Proceedings of the VLDB Endowment*, 11(2): 189–202, October 2017. CODEN ???? ISSN 2150-8097.

He:2017:SST

[1850] Liang He, Bin Shao, Yatao Li, Huanhuan Xia, Yanghua Xiao, Enhong Chen, and Liang Jeff Chen. Stylus: a strongly-typed store for serving massive RDF data. *Proceedings of the VLDB Endowment*, 11(2):203–216, October 2017. CODEN ???? ISSN 2150-8097.

Ioannou:2017:HQE

[1851] Ekaterini Ioannou and Minos Garofalakis. Holistic query evaluation over information extraction pipelines. *Proceedings of the VLDB Endowment*, 11 (2):217–229, October 2017. CODEN ???? ISSN 2150-8097.

Psaropoulos:2017:ICP

[1852] Georgios Psaropoulos, Thomas Legler, Norman May, and Anastasia Ailamaki. Interleaving with coroutines: a practical approach for robust index joins. *Proceedings of the VLDB Endowment*, 11(2):230–242, October 2017. CODEN ???? ISSN 2150-8097.

Wen:2017:ESG

[1853] Dong Wen, Lu Qin, Ying Zhang, Lijun Chang, and Xuemin Lin. Efficient structural graph clustering: an index-based approach. *Proceedings of the VLDB Endowment*, 11(3):243–255, November 2017. CODEN ???? ISSN 2150-8097.

DeCapitanidiVimercati:2017:AMM

[1854] Sabrina De Capitani di Vimercati, Sara Foresti, Sushil Jajodia, Giovanni Livraga, Stefano Paraboschi, and Pierangela Samarati. An authorization model for multi provider queries. *Proceedings of the VLDB Endowment*, 11 (3):256–268, November 2017. CODEN ???? ISSN 2150-8097.

Ratner:2017:SRT

[1855] Alexander Ratner, Stephen H. Bach, Henry Ehrenberg, Jason Fries, Sen Wu, and Christopher Ré. Snorkel: rapid training data creation with weak supervision. *Proceedings of the VLDB Endowment*, 11(3):269–282, November 2017. CODEN ???? ISSN 2150-8097.

Li:2017:VPV

[1856] Yuliang Li, Alin Deutsch, and Victor Vianu. VERIFAS: a practical verifier for artifact systems. *Proceedings of the VLDB Endowment*, 11(3):283–296, November 2017. CODEN ???? ISSN 2150-8097.

Jia:2017:DMG

[1857] Zhihao Jia, Yongkee Kwon, Galen Shipman, Pat McCormick, Mattan Erez, and Alex Aiken. A distributed multi-GPU system for fast graph processing. *Proceedings of the VLDB Endowment*, 11(3):297–310, November 2017. CODEN ???? ISSN 2150-8097.

Bleifuss:2017:EDC

[1858] Tobias Bleifuß, Sebastian Kruse, and Felix Naumann. Efficient denial constraint discovery with Hydra. *Proceedings of the VLDB Endowment*, 11 (3):311–323, November 2017. CODEN ???? ISSN 2150-8097.

Azim:2017:RRC

[1859] Tahir Azim, Manos Karpathiotakis, and Anastasia Ailamaki. ReCache: reactive caching for fast analytics over heterogeneous data. *Proceedings of the VLDB Endowment*, 11(3):324–337, November 2017. CODEN ???? ISSN 2150-8097.

Yuan:2017:EED

[1860] Long Yuan, Lu Qin, Xuemin Lin, Lijun Chang, and Wenjie Zhang. Effective and efficient dynamic graph coloring. *Proceedings of the VLDB Endowment*, 11(3):338–351, November 2017. CODEN ???? ISSN 2150-8097.

Zacharatou:2017:GRR

[1861] Eleni Tzirita Zacharatou, Harish Doraiswamy, Anastasia Ailamaki, Cláudio T. Silva, and Juliana Freiref. GPU rasterization for real-time spatial aggregation over arbitrary polygons. *Proceedings of the VLDB Endowment*, 11(3):352–365, November 2017. CODEN ???? ISSN 2150-8097.

Shah:2017:KFK

[1862] Vraj Shah, Arun Kumar, and Xiaojin Zhu. Are key–foreign key joins safe to avoid when learning high-capacity classifiers? *Proceedings of the VLDB Endowment*, 11(3):366–379, November 2017. CODEN ???? ISSN 2150-8097.

Liu:2017:WRC

[1863] Zheng Liu and Lei Chen. Worker recommendation for crowdsourced Q&A services: a triple-factor aware approach. *Proceedings of the VLDB Endowment*, 11(3):380–392, November 2017. CODEN ???? ISSN 2150-8097.

Gong:2017:CSD

[1864] Shufeng Gong, Yanfeng Zhang, and Ge Yu. Clustering stream data by exploring the evolution of density mountain. *Proceedings of the VLDB Endowment*, 11(4):393–405, December 2017. CODEN ???? ISSN 2150-8097.

Wang:2017:QFL

[1865] Tianzheng Wang, Ryan Johnson, and Ippokratis Pandis. Query fresh: log shipping on steroids. *Proceedings of the VLDB Endowment*, 11(4):406–419, December 2017. CODEN ???? ISSN 2150-8097.

Sahu:2017:ULG

[1866] Siddhartha Sahu, Amine Mhedhbi, Semih Salihoglu, Jimmy Lin, and M. Tamer Özsu. The ubiquity of large graphs and surprising challenges of graph processing. *Proceedings of the VLDB Endowment*, 11(4):420–431, December 2017. CODEN ???? ISSN 2150-8097.

Ramachandra:2017:FOI

[1867] Karthik Ramachandra, Kwanghyun Park, K. Venkatesh Emani, Alan Halverson, César Galindo-Legaria, and Conor Cunningham. Froid: optimization of imperative programs in a relational database. *Proceedings of the VLDB Endowment*, 11(4):432–444, December 2017. CODEN ???? ISSN 2150-8097.

Li:2017:ESH

[1868] Ye Li, Leong Hou U., Man Lung Yiu, and Ngai Meng Kou. An experimental study on hub labeling based shortest path algorithms. *Proceedings of the VLDB Endowment*, 11(4):445–457, December 2017. CODEN ???? ISSN 2150-8097.

Merritt:2017:CLS

[1869] Alexander Merritt, Ada Gavrilovska, Yuan Chen, and Dejan Milojicic. Concurrent log-structured memory for many-core key–value stores. *Proceedings of the VLDB Endowment*, 11(4): 458–471, December 2017. CODEN ???? ISSN 2150-8097.

Ceccarello:2017:CUG

[1870] Matteo Ceccarello, Carlo Fantozzi, Andrea Pietracaprina, Geppino Pucci, and Fabio Vandin. Clustering uncertain graphs. *Proceedings of the VLDB*

Endowment, 11(4):472–484, December 2017. CODEN ???? ISSN 2150-8097.

Abdelaziz:2017:LSQ

[1871] Ibrahim Abdelaziz, Essam Mansour, Mourad Ouzzani, Ashraf Aboulnaga, and Panos Kalnis. Lusail: a system for querying linked data at scale. *Proceedings of the VLDB Endowment*, 11 (4):485–498, December 2017. CODEN ???? ISSN 2150-8097.

Harmouch:2017:CEE

[1872] Hazar Harmouch and Felix Naumann. Cardinality estimation: an experimental survey. *Proceedings of the VLDB Endowment*, 11(4):499–512, December 2017. CODEN ???? ISSN 2150-8097.

Park:2017:SSL

[1873] Jong-Hyeok Park, Gihwan Oh, and Sang-Won Lee. SQL statement logging for making SQLite truly lite. *Proceedings of the VLDB Endowment*, 11(4): 513–525, December 2017. CODEN ???? ISSN 2150-8097.

Johnson:2018:TPD

[1874] Noah Johnson, Joseph P. Near, and Dawn Song. Towards practical differential privacy for SQL queries. *Proceedings of the VLDB Endowment*, 11(5): 526–539, January 2018. CODEN ???? ISSN 2150-8097.

Shraer:2018:CSS

[1875] Alexander Shraer, Alexandre Aybes, Bryan Davis, Christos Chrysafis, Dave Browning, Eric Krugler, Eric Stone, Harrison Chandler, Jacob Farkas, John Quinn, Jonathan Ruben, Michael Ford, Mike McMahon, Nathan Williams, Nicolas Favre-Felix, Nihar Sharma, Ori Herrnstadt, Paul Seligman, Raghav Pisolkar, Scott Dugas, Scott Gray, Sytze Harkema, Valentin Kravtsov, Vanessa Hong, Wan Ling Yih, and Yizuo Tian. Cloudkit: structured storage for mobile applications. *Proceedings of the VLDB Endowment*, 11(5): 540–552, January 2018. CODEN ???? ISSN 2150-8097.

Arulraj:2018:BHP

[1876] Joy Arulraj, Justin Levandoski, Umar Farooq Minhas, and Per-Ake Larson. Bztree: a high-performance latch-free range index for non-volatile memory. *Proceedings of the VLDB Endowment*, 11(5):553–565, January 2018. CODEN ???? ISSN 2150-8097.

Huang:2018:FFP

[1877] Yuzhen Huang, Tatiana Jin, Yidi Wu, Zhenkun Cai, Xiao Yan, Fan Yang, Jinfeng Li, Yuying Guo, and James Cheng. FlexPS: flexible parallelism control in parameter server architecture. *Proceedings of the VLDB Endowment*, 11(5): 566–579, January 2018. CODEN ???? ISSN 2150-8097.

Yaghmazadeh:2018:AMH

[1878] Navid Yaghmazadeh, Xinyu Wang, and Isil Dillig. Automated migration of hierarchical data to relational tables using programming-by-example. *Proceedings of the VLDB Endowment*, 11(5): 580–593, January 2018. CODEN ???? ISSN 2150-8097.

Luo:2018:TTO

[1879] Siqiang Luo, Ben Kao, Guoliang Li, Jiafeng Hu, Reynold Cheng, and Yudian Zheng. TOAIN: a throughput optimizing adaptive index for answering dynamic k NN queries on road networks. *Proceedings of the VLDB Endowment*, 11(5):594–606, January 2018. CODEN ???? ISSN 2150-8097.

Li:2018:EMT

[1880] Tian Li, Jie Zhong, Ji Liu, Wentao Wu, and Ce Zhang. Ease.ml: towards multi-tenant resource sharing for machine learning workloads. *Proceedings of the VLDB Endowment*, 11(5):607–620, January 2018. CODEN ???? ISSN 2150-8097.

Qi:2018:TOE

[1881] Jianzhong Qi, Yufei Tao, Yanchuan Chang, and Rui Zhang. Theoretically optimal and empirically efficient R-trees with strong parallelizability. *Proceedings of the VLDB Endowment*, 11 (5):621–634, January 2018. CODEN ???? ISSN 2150-8097.

Lin:2018:DAM

[1882] Xueling Lin and Lei Chen. Domain-aware multi-truth discovery from conflicting sources. *Proceedings of the VLDB Endowment*, 11(5):635–647, January 2018. CODEN ???? ISSN 2150-8097.

Tian:2018:CAL

[1883] Boyu Tian, Jiamin Huang, Barzan Mozafari, and Grant Schoenebeck. Contention-aware lock scheduling for transactional databases. *Proceedings of the VLDB Endowment*, 11(5):648–662, January 2018. CODEN ???? ISSN 2150-8097.

Patel:2018:QDP

[1884] Jignesh M. Patel, Harshad Deshmukh, Jianqiao Zhu, Navneet Potti, Zuyu Zhang, Marc Spehlmann, Hakan Memisoglu, and Saket Saurabh. Quickstep: a data platform based on the scaling-up approach. *Proceedings of the VLDB Endowment*, 11(6):663–676, February 2018. CODEN ???? ISSN 2150-8097.

Kondylakis:2018:CSB

[1885] Haridimos Kondylakis, Niv Dayan, Kostas Zoumpatianos, and Themis Palpanas. Coconut: a scalable bottom-up approach for building data series indexes. *Proceedings of the VLDB Endowment*, 11(6):677–690, February 2018. CODEN ???? ISSN 2150-8097.

Ammar:2018:DES

[1886] Khaled Ammar, Frank McSherry, Semih Salihoglu, and Manas Joglekar. Distributed evaluation of subgraph queries using worst-case optimal low-memory dataflows. *Proceedings of the VLDB Endowment*, 11(6):691–704, February 2018. CODEN ???? ISSN 2150-8097.

Li:2018:MFC

[1887] Teng Li, Zhiyuan Xu, Jian Tang, and Yanzhi Wang. Model-free control for distributed stream data processing using deep reinforcement learning. *Proceedings of the VLDB Endowment*, 11 (6):705–718, February 2018. CODEN ???? ISSN 2150-8097.

Psallidas:2018:SFG

[1888] Fotis Psallidas and Eugene Wu. Smoke: fine-grained lineage at interactive speed. *Proceedings of the VLDB Endowment*, 11(6):719–732, February 2018. CODEN ???? ISSN 2150-8097.

Idris:2018:CQI

[1889] Muhammad Idris, Martín Ugarte, Stijn Vansummeren, Hannes Voigt, and Wolfgang Lehner. Conjunctive queries with inequalities under updates. *Proceedings of the VLDB Endowment*, 11 (7):733–745, March 2018. CODEN ???? ISSN 2150-8097.

Yint:2018:BER

[1890] Zhicheng Yint, Jin Sun, Ming Li, Jaliya Ekanayake, Haibo Lin, Marc Friedman, José A. Blakeley, Clemens Szyperski, and Nikhil R. Devanur. Bubble execution: resource-aware reliable analytics at cloud scale. *Proceedings of the VLDB Endowment*, 11(7):746–758, March 2018. CODEN ???? ISSN 2150-8097.

Kruse:2018:EDA

[1891] Sebastian Kruse and Felix Naumann. Efficient discovery of approximate dependencies. *Proceedings of the VLDB Endowment*, 11(7):759–772, March 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:RID

[1892] Yue Wang, Alexandra Meliou, and Gerome Miklau. RC-index: diversifying answers to range queries. *Proceedings of the VLDB Endowment*, 11(7): 773–786, March 2018. CODEN ???? ISSN 2150-8097.

Ding:2018:UUP

[1893] Xin Ding, Lu Chen, Yunjun Gao, Christian S. Jensen, and Hujun Bao. UlTraMan: a unified platform for big trajectory data management and analytics. *Proceedings of the VLDB Endowment*, 11(7):787–799, March 2018. CODEN ???? ISSN 2150-8097.

Jindal:2018:SSM

[1894] Alekh Jindal, Konstantinos Karanasos, Sriram Rao, and Hiren Patel. Selecting subexpressions to materialize at datacenter scale. *Proceedings of the VLDB Endowment*, 11(7):800–812, March 2018. CODEN ???? ISSN 2150-8097.

Nargesian:2018:TUS

[1895] Fatemeh Nargesian, Erkang Zhu, Ken Q. Pu, and Renée J. Miller. Table union search on open data. *Proceedings of the VLDB Endowment*, 11(7): 813–825, March 2018. CODEN ???? ISSN 2150-8097.

Chen:2018:STH

[1896] Jianfei Chen, Jun Zhu, Jie Lu, and Shixia Liu. Scalable training of hierarchical topic models. *Proceedings of the VLDB Endowment*, 11(7):826–839, March 2018. CODEN ???? ISSN 2150-8097.

Coskun:2018:IFN

[1897] Mustafa Coskun, Ananth Grama, and Mehmet Koyutürk. Indexed fast network proximity querying. *Proceedings of the VLDB Endowment*, 11(8):840–852, April 2018. CODEN ???? ISSN 2150-8097.

Zheng:2018:ODP

[1898] Libin Zheng, Lei Chen, and Jieping Ye. Order dispatch in price-aware ridesharing. *Proceedings of the VLDB Endowment*, 11(8):853–865, April 2018. CODEN ???? ISSN 2150-8097.

Mouratidis:2018:EPU

[1899] Kyriakos Mouratidis and Bo Tang. Exact processing of uncertain top-k queries in multi-criteria settings. *Proceedings of the VLDB Endowment*, 11 (8):866–879, April 2018. CODEN ???? ISSN 2150-8097.

Berti-Equille:2018:DGF

[1900] Laure Berti-Équille, Hazar Harmouch, Felix Naumann, Noël Novelli, and Saravanan Thirumuruganathan. Discovery of genuine functional dependencies from relational data with missing values. *Proceedings of the VLDB Endowment*, 11(8):880–892, April 2018. CODEN ???? ISSN 2150-8097.

Cai:2018:ETD

[1901] Qingchao Cai, Zhongle Xie, Meihui Zhang, Gang Chen, H. V. Jagadish, and Beng Chin Ooi. Effective temporal dependence discovery in time series data. *Proceedings of the VLDB Endowment*, 11(8):893–905, April 2018. CODEN ???? ISSN 2150-8097.

Arora:2018:HIP

[1902] Akhil Arora, Sakshi Sinha, Piyush Kumar, and Arnab Bhattacharya. HD-index: pushing the scalability-accuracy boundary for approximate kNN search in high-dimensional spaces. *Proceedings of the VLDB Endowment*, 11(8):906–919, April 2018. CODEN ???? ISSN 2150-8097.

Ahmad:2018:LSL

[1903] Yousuf Ahmad, Omar Khattab, Arsal Malik, Ahmad Musleh, Mohammad Hammoud, Mucahid Kutlu, Mostafa Shehata, and Tamer Elsayed. LA3: a scalable link- and locality-aware linear algebra-based graph analytics system. *Proceedings of the VLDB Endowment*, 11(8):920–933, April 2018. CODEN ???? ISSN 2150-8097.

Zhang:2018:TSE

[1904] Dongxiang Zhang, Mengting Ding, Dingyu Yang, Yi Liu, Ju Fan, and Heng Tao Shen. Trajectory simplification: an experimental study and quality analysis. *Proceedings of the VLDB Endowment*, 11(9):934–946, May 2018. CODEN ???? ISSN 2150-8097.

Antenucci:2018:CBE

[1905] Dolan Antenucci and Michael Cafarella. Constraint-based explanation and repair of filter-based transformations. *Proceedings of the VLDB Endowment*, 11(9):947–960, May 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:SSQ

[1906] Xiaolan Wang, Aaron Feng, Behzad Golshan, Alon Halevy, George Mihaila, Hidekazu Oiwa, and Wang-Chiew Tan. Scalable semantic querying of text. *Proceedings of the VLDB Endowment*, 11(9):961–974, May 2018. CODEN ???? ISSN 2150-8097.

Bellomarini:2018:VSD

[1907] Luigi Bellomarini, Emanuel Sallinger, and Georg Gottlob. The Vadalog system: datalog-based reasoning for knowledge graphs. *Proceedings of the VLDB Endowment*, 11(9):975–987, May 2018. CODEN ???? ISSN 2150-8097.

Medya:2018:NND

[1908] Sourav Medya, Sayan Ranu, Jithin Vachery, and Ambuj Singh. Noticeable network delay minimization via node upgrades. *Proceedings of the VLDB Endowment*, 11(9):988–1001, May 2018. CODEN ???? ISSN 2150-8097.

Palkar:2018:EEE

[1909] Shoumik Palkar, James Thomas, Deepak Narayanan, Pratiksha Thaker, Rahul Palamuttam, Parimajan Negi, Anil Shanbhag, Malte Schwarzkopf, Holger Pirk, Saman Amarasinghe, Samuel Madden, and Matei Zaharia. Evaluating end-to-end optimization for data analytics applications in Weld. *Proceedings of the VLDB Endowment*, 11(9):1002–1015, May 2018. CODEN ???? ISSN 2150-8097.

Muller:2018:ISE

[1910] Magnus Müller, Guido Moerkotte, and Oliver Kolb. Improved selectivity estimation by combining knowledge from sampling and synopses. *Proceedings of the VLDB Endowment*, 11(9):1016–1028, May 2018. CODEN ???? ISSN 2150-8097.

Han:2018:EAA

[1911] Kai Han, Keke Huang, Xiaokui Xiao, Jing Tang, Aixin Sun, and Xueyan Tang. Efficient algorithms for adaptive influence maximization. *Proceedings of the VLDB Endowment*, 11(9): 1029–1040, May 2018. CODEN ???? ISSN 2150-8097.

Breslow:2018:MFF

[1912] Alex D. Breslow and Nuwan S. Jayasena. Morton filters: faster, space-efficient cuckoo filters via biasing, compression, and decoupled logical sparsity. *Proceedings of the VLDB Endowment*, 11(9):1041–1055, May 2018. CODEN ???? ISSN 2150-8097.

Bi:2018:OPA

[1913] Fei Bi, Lijun Chang, Xuemin Lin, and Wenjie Zhang. An optimal and progressive approach to online search of top-*k* influential communities. *Proceedings of the VLDB Endowment*, 11(9):1056–1068, May 2018. CODEN ???? ISSN 2150-8097.

Meister:2018:EAT

[1914] Andreas Meister, Guido Moerkotte, and Gunter Saake. Errata for "Analysis of two existing and one new dynamic programming algorithm for the generation of optimal bushy join trees without cross products". *Proceedings of the VLDB Endowment*, 11(10):1069–1070, June 2018. CODEN ???? ISSN 2150-8097.

Park:2018:DSB

[1915] Noseong Park, Mahmoud Mohammadi, Kshitij Gorde, Sushil Jajodia, Hongkyu Park, and Youngmin Kim. Data synthesis based on generative adversarial networks. *Proceedings of the VLDB Endowment*, 11(10):1071–1083, June 2018. CODEN ???? ISSN 2150-8097.

Lockard:2018:CDS

[1916] Colin Lockard, Xin Luna Dong, Arash Einolghozati, and Prashant Shiralkar. CERES: distantly supervised relation extraction from the semi-structured web. *Proceedings of the VLDB Endowment*, 11(10):1084–1096, June 2018. CODEN ???? ISSN 2150-8097.

Nazi:2018:EEI

[1917] Azade Nazi, Bolin Ding, Vivek Narasayya, and Surajit Chaudhuri. Efficient estimation of inclusion coefficient using hyperloglog sketches. *Proceedings of the VLDB Endowment*, 11 (10):1097–1109, June 2018. CODEN ???? ISSN 2150-8097.

Fier:2018:SSJ

[1918] Fabian Fier, Nikolaus Augsten, Panagiotis Bouros, Ulf Leser, and Johann-Christoph Freytag. Set similarity joins on MapReduce: an experimental survey. *Proceedings of the VLDB Endowment*, 11(10):1110–1122, June 2018. CODEN ???? ISSN 2150-8097.

Ding:2018:PSH

[1919] Bailu Ding, Sudipto Das, Wentao Wu, Surajit Chaudhuri, and Vivek Narasayya. Plan Stitch: harnessing the best of many plans. *Proceedings of the VLDB Endowment*, 11(10):1123–1136, June 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:FES

[1920] Sheng Wang, Tien Tuan Anh Dinh, Qian Lin, Zhongle Xie, Meihui Zhang, Qingchao Cai, Gang Chen, Beng Chin Ooi, and Pingcheng Ruan. Forkbase: an efficient storage engine for blockchain and forkable applications. *Proceedings of the VLDB Endowment*, 11(10):1137–1150, June 2018. CODEN ???? ISSN 2150-8097.

Ammar:2018:EAD

[1921] Khaled Ammar and M. Tamer Özsu. Experimental analysis of distributed graph systems. *Proceedings of the VLDB Endowment*, 11(10):1151–1164, June 2018. CODEN ???? ISSN 2150-8097.

He:2018:TDE

[1922] Yeye He, Xu Chu, Kris Ganjam, Yudian Zheng, Vivek Narasayya, and Surajit Chaudhuri. Transform-data-by-example (TDE): an extensible search engine for data transformations. *Proceedings of the VLDB Endowment*, 11(10):1165–1177, June 2018. CODEN ???? ISSN 2150-8097.

OKeeffe:2018:FRE

[1923] Dan O'Keeffe, Theodoros Salonidis, and Peter Pietzuch. Frontier: resilient edge processing for the Internet of Things. *Proceedings of the VLDB Endowment*, 11(10):1178–1191, June 2018. CODEN ???? ISSN 2150-8097.

Haynes:2018:LDV

[1924] Brandon Haynes, Amrita Mazumdar, Armin Alaghi, Magdalena Balazinska, Luis Ceze, and Alvin Cheung. LightDB: a DBMS for virtual reality video. *Proceedings of the VLDB Endowment*, 11(10):1192–1205, June 2018. CODEN ???? ISSN 2150-8097.

McKenna:2018:OEH

[1925] Ryan McKenna, Gerome Miklau, Michael Hay, and Ashwin Machanavajjhala. Optimizing error of high-dimensional statistical queries under differential privacy. *Proceedings of the VLDB Endowment*, 11(10):1206–1219, June 2018. CODEN ???? ISSN 2150-8097.

Liu:2018:MBM

[1926] Yu Liu, Hantian Zhang, Luyuan Zeng, Wentao Wu, and Ce Zhang. MLbench: benchmarking machine learning services against human experts. *Proceedings of the VLDB Endowment*, 11 (10):1220–1232, June 2018. CODEN ???? ISSN 2150-8097.

Chen:2018:MCL

[1927] Lu Chen, Chengfei Liu, Rui Zhou, Jianxin Li, Xiaochun Yang, and Bin Wang. Maximum co-located community search in large scale social networks. *Proceedings of the VLDB*

Endowment, 11(10):1233–1246, June 2018. CODEN ???? ISSN 2150-8097.

Zalipynis:2018:CDF

[1928] Ramon Antonio Rodriges Zalipynis. ChronosDB: distributed, file based, geospatial array DBMS. *Proceedings of the VLDB Endowment*, 11(10):1247–1261, June 2018. CODEN ???? ISSN 2150-8097.

Macke:2018:ASR

[1929] Stephen Macke, Yiming Zhang, Silu Huang, and Aditya Parameswaran. Adaptive sampling for rapidly matching histograms. *Proceedings of the VLDB Endowment*, 11(10):1262–1275, June 2018. CODEN ???? ISSN 2150-8097.

Asudeh:2018:LSJ

[1930] Abolfazl Asudeh, Azade Nazi, Jees Augustine, Saravanan Thirumuruganathan, Nan Zhang, Gautam Das, and Divesh Srivastava. Leveraging similarity joins for signal reconstruction. *Proceedings of the VLDB Endowment*, 11(10):1276–1288, June 2018. CODEN ???? ISSN 2150-8097.

Yu:2018:SHC

[1931] Xiangyao Yu, Yu Xia, Andrew Pavlo, Daniel Sanchez, Larry Rudolph, and Srinivas Devadas. Sundial: harmonizing concurrency control and caching in a distributed OLTP database management system. *Proceedings of the VLDB Endowment*, 11(10):1289–1302, June 2018. CODEN ???? ISSN 2150-8097.

Mai:2018:CSP

[1932] Luo Mai, Kai Zeng, Rahul Potharaju, Le Xu, Steve Suh, Shivaram Venkataraman, Paolo Costa, Terry Kim, Saravanan Muthukrishnan, Vamsi Kuppa, Sudheer Dhulipalla, and Sriram Rao. Chi: a scalable and programmable control plane for distributed stream processing systems. *Proceedings of the VLDB Endowment*, 11(10):1303–1316, June 2018. CODEN ???? ISSN 2150-8097.

Mahajan:2018:RHA

[1933] Divya Mahajan, Joon Kyung Kim, Jacob Sacks, Adel Ardalan, Arun Kumar, and Hadi Esmaeilzadeh. In-RDBMS hardware acceleration of advanced analytics. *Proceedings of the VLDB Endowment*, 11(11):1317–1331, July 2018. CODEN ???? ISSN 2150-8097.

Kolchinsky:2018:JQO

[1934] Ilya Kolchinsky and Assaf Schuster. Join query optimization techniques for complex event processing applications. *Proceedings of the VLDB Endowment*, 11(11):1332–1345, July 2018. CODEN ???? ISSN 2150-8097.

Kolchinsky:2018:EAD

[1935] Ilya Kolchinsky and Assaf Schuster. Efficient adaptive detection of complex event patterns. *Proceedings of the VLDB Endowment*, 11(11):1346–1359, July 2018. CODEN ???? ISSN 2150-8097.

Wolf:2018:RMR

[1936] Florian Wolf, Michael Brendle, Norman May, Paul R. Willems, Kai-Uwe Sattler, and Michael Grossniklaus. Robustness metrics for relational query execution plans. *Proceedings of the VLDB Endowment*, 11(11):1360–1372, July 2018. CODEN ???? ISSN 2150-8097.

Zheng:2018:QAK

[1937] Weiguo Zheng, Jeffrey Xu Yu, Lei Zou, and Hong Cheng. Question answering over knowledge graphs: question understanding via template decomposition. *Proceedings of the VLDB Endowment*, 11(11):1373–1386, July 2018. CODEN ???? ISSN 2150-8097.

Rammelaere:2018:ERD

[1938] Joeri Rammelaere and Floris Geerts. Explaining repaired data with CFDs. *Proceedings of the VLDB Endowment*, 11(11):1387–1399, July 2018. CODEN ???? ISSN 2150-8097.

Dsilva:2018:AAA

[1939] Joseph Vinish D'silva, Florestan De Moor, and Bettina Kemme. AIDA: abstraction for advanced in-database analytics. *Proceedings of the VLDB Endowment*, 11(11):1400–1413, July 2018. CODEN ???? ISSN 2150-8097.

Agrawal:2018:REC

[1940] Divy Agrawal, Sanjay Chawla, Bertty Contreras-Rojas, Ahmed Elmagarmid, Yasser Idris, Zoi Kaoudi, Sebastian Kruse, Ji Lucas, Essam Mansour, Mourad Ouzzani, Paolo Papotti, Jorge-Arnulfo Quiané-Ruiz, Nan Tang, Saravanan Thirumuruganathan, and Anis Troudi. RHEEM: enabling cross-platform data processing: may the big data be with you! *Proceedings of the VLDB Endowment*, 11(11):1414–1427, July 2018. CODEN ???? ISSN 2150-8097.

Cheng:2018:EET

[1941] Peng Cheng, Xun Jian, and Lei Chen. An experimental evaluation of task assignment in spatial crowdsourcing. *Proceedings of the VLDB Endowment*, 11(11):1428–1440, July 2018. CODEN ???? ISSN 2150-8097.

Kumar:2018:EAE

[1942] Rohit Kumar and Toon Calders. 2SCENT: an efficient algorithm for enumerating all simple temporal cycles. *Proceedings of the VLDB Endowment*, 11(11):1441–1453, July 2018. CODEN ???? ISSN 2150-8097.

Ebraheem:2018:DRT

[1943] Muhammad Ebraheem, Saravanan Thirumuruganathan, Shafiq Joty, Mourad Ouzzani, and Nan Tang. Distributed representations of tuples for entity resolution. *Proceedings of the VLDB Endowment*, 11(11):1454–1467, July 2018. CODEN ???? ISSN 2150-8097.

Hasani:2018:ECA

[1944] Sona Hasani, Saravanan Thirumuruganathan, Abolfazl Asudeh, Nick Koudas, and Gautam Das. Efficient construction of approximate ad-hoc ML models through materialization and reuse. *Proceedings of the VLDB Endowment*, 11(11):1468–1481, July 2018. CODEN ???? ISSN 2150-8097.

Chu:2018:AFA

[1945] Shumo Chu, Brendan Murphy, Jared Roesch, Alvin Cheung, and Dan Suciu. Axiomatic foundations and algorithms for deciding semantic equivalences of SQL queries. *Proceedings of the VLDB Endowment*, 11(11):1482–1495, July 2018. CODEN ???? ISSN 2150-8097.

Almutairi:2018:HSS

[1946] Faisal M. Almutairi, Fan Yang, Hyun Ah Song, Christos Faloutsos, Nicholas Sidiropoulos, and Vladimir Zadorozhny. Homerun: scalable sparse-spectrum reconstruction of aggregated historical data. *Proceedings of the VLDB Endowment*, 11(11):1496–1508, July 2018. CODEN ???? ISSN 2150-8097.

Kuo:2018:DPH

[1947] Yu-Hsuan Kuo, Cho-Chun Chiu, Daniel Kifer, Michael Hay, and Ashwin Machanavajjhala. Differentially private hierarchical count-of-counts histograms. *Proceedings of the VLDB Endowment*, 11(11):1509–1521, July 2018. CODEN ???? ISSN 2150-8097.

Zhang:2018:EDA

[1948] Feng Zhang, Jidong Zhai, Xipeng Shen, Onur Mutlu, and Wenguang Chen. Efficient document analytics on compressed data: method, challenges, algorithms, insights. *Proceedings of the VLDB Endowment*, 11(11):1522–1535, July 2018. CODEN ???? ISSN 2150-8097.

Muller:2018:YSW

[1949] Tobias Müller, Benjamin Dietrich, and Torsten Grust. You say 'what', I hear 'where' and 'why': (mis-)interpreting SQL to derive fine-grained provenance. *Proceedings of the VLDB Endowment*, 11(11):1536–1549, July 2018. CODEN ???? ISSN 2150-8097.

Schulz:2018:EDS

[1950] Lars-Christian Schulz, David Broneske, and Gunter Saake. An eight-dimensional systematic evaluation of optimized search algorithms on modern processors. *Proceedings of the VLDB Endowment*, 11(11):1550–1562, July 2018. CODEN ???? ISSN 2150-8097.

Trummer:2018:VLT

[1951] Immanuel Trummer, Mark Bryan, and Ramya Narasimha. Vocalizing large time series efficiently. *Proceedings of the VLDB Endowment*, 11(11):1563–1575, July 2018. CODEN ???? ISSN 2150-8097.

Palkar:2018:FBY

[1952] Shoumik Palkar, Firas Abuzaid, Peter Bailis, and Matei Zaharia. Filter before you parse: faster analytics on raw data with sparser. *Proceedings of the VLDB Endowment*, 11(11):1576–1589, July 2018. CODEN ???? ISSN 2150-8097.

Abbas:2018:SGP

[1953] Zainab Abbas, Vasiliki Kalavri, Paris Carbone, and Vladimir Vlassov. Streaming graph partitioning: an experimental study. *Proceedings of the VLDB Endowment*, 11(11):1590–1603, July 2018. CODEN ???? ISSN 2150-8097.

Cai:2018:EDM

[1954] Qingchao Cai, Wentian Guo, Hao Zhang, Divyakant Agrawal, Gang Chen, Beng Chin Ooi, Kian-Lee Tan, Yong Meng Teo, and Sheng Wang. Efficient distributed memory management with RDMA and caching. *Proceedings of the VLDB Endowment*, 11(11):1604–1617, July 2018. CODEN ???? ISSN 2150-8097.

Didona:2018:CCL

[1955] Diego Didona, Rachid Guerraoui, Jingjing Wang, and Willy Zwaenepoel.

Causal consistency and latency optimality: friend or foe? *Proceedings of the VLDB Endowment*, 11(11):1618–1632, July 2018. CODEN ???? ISSN 2150-8097.

Tong:2018:UAR

[1956] Yongxin Tong, Yuxiang Zeng, Zimu Zhou, Lei Chen, Jieping Ye, and Ke Xu. A unified approach to route planning for shared mobility. *Proceedings of the VLDB Endowment*, 11(11): 1633–1646, July 2018. CODEN ???? ISSN 2150-8097.

Gan:2018:MBQ

[1957] Edward Gan, Jialin Ding, Kai Sheng Tai, Vatsal Sharan, and Peter Bailis. Moment-based quantile sketches for efficient high cardinality aggregation queries. *Proceedings of the VLDB Endowment*, 11(11):1647–1660, July 2018. CODEN ???? ISSN 2150-8097.

Pandey:2018:HGM

[1958] Varun Pandey, Andreas Kipf, Thomas Neumann, and Alfons Kemper. How good are modern spatial analytics systems? *Proceedings of the VLDB Endowment*, 11(11):1661–1673, July 2018. CODEN ???? ISSN 2150-8097.

Rong:2018:LSH

[1959] Kexin Rong, Clara E. Yoon, Karianne J. Bergen, Hashem Elezabi, Peter Bailis, Philip Levis, and Gregory C. Beroza. Locality-sensitive hashing for earthquake detection: a case study of scaling data-driven science. *Proceedings of the VLDB Endowment*, 11(11):1674–1687, July 2018. CODEN ???? ISSN 2150-8097.

Jensen:2018:MMM

[1960] Søren Kejser Jensen, Torben Bach Pedersen, and Christian Thomsen. ModelarDB: modular model-based time series management with Spark and Cassandra. *Proceedings of the VLDB Endowment*, 11(11):1688–1701, July 2018. CODEN ???? ISSN 2150-8097.

Jonathan:2018:ECA

[1961] Christopher Jonathan, Umar Farooq Minhas, James Hunter, Justin Levandoski, and Gor Nishanov. Exploiting coroutines to attack the “killer nanoseconds”. *Proceedings of the VLDB Endowment*, 11(11):1702–1714, July 2018. CODEN ???? ISSN 2150-8097.

Bindschaedler:2018:TIP

[1962] Vincent Bindschaedler, Paul Grubbs, David Cash, Thomas Ristenpart, and Vitaly Shmatikov. The tao of inference in privacy-protected databases. *Proceedings of the VLDB Endowment*, 11 (11):1715–1728, July 2018. CODEN ???? ISSN 2150-8097.

Demertzis:2018:ESE

[1963] Ioannis Demertzis, Rajdeep Talapatra, and Charalampos Papamanthou. Efficient searchable encryption through compression. *Proceedings of the VLDB Endowment*, 11(11):1729–1741, July 2018. CODEN ???? ISSN 2150-8097.

Li:2018:CEB

[1964] Shen Li, Paul Gerver, John MacMillan, Daniel Debrunner, William Marshall, and Kun-Lung Wu. Challenges and experiences in building an efficient Apache Beam runner for IBM streams. *Proceedings of the VLDB Endowment*, 11(12):1742–1754, August 2018. CODEN ???? ISSN 2150-8097.

Boehm:2018:OOF

[1965] Matthias Boehm, Berthold Reinwald, Dylan Hutchison, Prithviraj Sen, Alexandre V. Evfimievski, and Niketan Pansare. On optimizing operator fusion plans for large-scale machine learning in systemML. *Proceedings of the VLDB Endowment*, 11(12):1755–1768, August 2018. CODEN ???? ISSN 2150-8097.

Rehrmann:2018:OCS

[1966] Robin Rehrmann, Carsten Binnig, Alexander Böhm, Kihong Kim, Wolfgang Lehner, and Amr Rizk. OLTP-share: the case for sharing in OLTP workloads. *Proceedings of the VLDB Endowment*, 11(12):1769–1780, August 2018. CODEN ???? ISSN 2150-8097.

Schelter:2018:ALS

[1967] Sebastian Schelter, Dustin Lange, Philipp Schmidt, Meltem Celikel, Felix Biessmann, and Andreas Grafberger. Automating large-scale data quality verification. *Proceedings of the VLDB Endowment*, 11(12):1781–1794, August 2018. CODEN ???? ISSN 2150-8097.

Shacham:2018:TOC

[1968] Ohad Shacham, Yonatan Gottesman, Aran Bergman, Edward Bortnikov, Eshcar Hillel, and Idit Keidar. Taking Omid to the clouds: fast, scalable transactions for real-time cloud analytics. *Proceedings of the VLDB Endowment*, 11(12):1795–1808, August 2018. CODEN ???? ISSN 2150-8097.

Jacques-Silva:2018:PSJ

[1969] Gabriela Jacques-Silva, Ran Lei, Luwei Cheng, Guoqiang Jerry Chen, Kuen Ching, Tanji Hu, Yuan Mei, Kevin Wilfong, Rithin Shetty, Serhat Yilmaz, Anirban Banerjee, Benjamin Heintz, Shridar Iyer, and Anshul Jaiswal. Providing streaming joins as a service at Facebook. *Proceedings of the VLDB Endowment*, 11(12):1809–1821, August 2018. CODEN ???? ISSN 2150-8097.

Cai:2018:FIL

[1970] Le Cai, Jianjun Chen, Jun Chen, Yu Chen, Kuorong Chiang, Marko Dimitrijevic, Yonghua Ding, Yu Dong, Ahmad Ghazal, Jacques Hebert, Kamini Jagtiani, Suzhen Lin, Ye Liu, Demai Ni, Chunfeng Pei, Jason Sun, Yongyan Wang, Li Zhang, Mingyi Zhang, and Cheng Zhu. Fusion insight librA: Huawei's enterprise cloud data analytics platform. *Proceedings of the VLDB Endowment*, 11(12):1822–1834, August 2018. CODEN ???? ISSN 2150-8097.

Samwel:2018:FQD

[1971] Bart Samwel, John Cieslewicz, Ben Handy, Jason Govig, Petros Venetis, Chanjun Yang, Keith Peters, Jeff Shute, Daniel Tenedorio, Himani Apte, Felix Weigel, David Wilhite, Jiacheng Yang, Jun Xu, Jiexing Li, Zhan Yuan, Craig Chasseur, Qiang Zeng, Ian Rae, Anurag Biyani, Andrew Harn, Yang Xia, Andrey Gubichev, Amr El-Helw, Orri Erling, Zhepeng Yan, Mohan Yang, Yiqun Wei, Thanh Do, Colin Zheng, Goetz Graefe, Somayeh Sardashti, Ahmed M. Aly, Divy Agrawal, Ashish Gupta, and Shiv Venkataraman. F1 query: declarative querying at scale. *Proceedings of the VLDB Endowment*, 11(12):1835–1848, August 2018. CODEN ???? ISSN 2150-8097.

Cao:2018:PUL

[1972] Wei Cao, Zhenjun Liu, Peng Wang, Sen Chen, Caifeng Zhu, Song Zheng, Yuhui Wang, and Guoqing Ma. PolarFS: an ultra-low latency and failure resilient distributed file system for shared storage cloud database. *Proceedings of the VLDB Endowment*, 11(12):1849–1862, August 2018. CODEN ???? ISSN 2150-8097.

Bortnikov:2018:ABM

[1973] Edward Bortnikov, Anastasia Braginsky, Eshcar Hillel, Idit Keidar, and Gali Sheffi. Accordion: better memory organization for LSM key–value stores. *Proceedings of the VLDB Endowment*, 11 (12):1863–1875, August 2018. CODEN ???? ISSN 2150-8097.

Qiu:2018:RTC

[1974] Xiafei Qiu, Wubin Cen, Zhengping Qian, You Peng, Ying Zhang, Xuemin Lin, and Jingren Zhou. Real-time constrained cycle detection in large dynamic graphs. *Proceedings of the VLDB Endowment*, 11(12):1876–1888, August 2018. CODEN ???? ISSN 2150-8097.

Gurajada:2018:BHM

[1975] Aditya Gurajada, Dheren Gala, Fei Zhou, Amit Pathak, and Zhan-Feng Ma. BTrim: hybrid in-memory database architecture for extreme transaction processing in VLDBs. *Proceedings of the VLDB Endowment*, 11 (12):1889–1901, August 2018. CODEN ???? ISSN 2150-8097.

S:2018:SSI

[1976] Avinesh P. V. S., Benjamin Hättasch, Orkan Özyurt, Carsten Binnig, and Christian M. Meyer. Sherlock: a system for interactive summarization of large text collections. *Proceedings of the VLDB Endowment*, 11(12):1902–1905, August 2018. CODEN ???? ISSN 2150-8097.

Behrens:2018:DFD

[1977] Hans Walter Behrens, K. Selçuk Candan, Xilun Chen, Ashish Gadkari, Yash Garg, Mao-Lin Li, Xinsheng Li, Sicong Liu, Nicholas Martinez, Jiayong Mo, Elliot Nester, Silvestro Poccia, Manjusha Ravindranath, and Maria Luisa Sapino. Datastorm-FE: a data- and decision-flow and coordination engine for coupled simulation ensembles. *Proceedings of the VLDB Endowment*, 11 (12):1906–1909, August 2018. CODEN ???? ISSN 2150-8097.

Zhang:2018:DOA

[1978] Bohan Zhang, Dana Van Aken, Justin Wang, Tao Dai, Shuli Jiang, Jacky Lao, Siyuan Sheng, Andrew Pavlo, and Geoffrey J. Gordon. A demonstration of the OtterTune automatic database management system tuning service. *Proceedings of the VLDB Endowment*, 11(12):1910–1913, August 2018. CODEN ???? ISSN 2150-8097.

Kakoulli:2018:OAT

[1979] Elena Kakoulli, Nikolaos D. Karmiris, and Herodotos Herodotou. OctopusFS in action: tiered storage management for data intensive computing. *Proceedings of the VLDB Endowment*, 11(12): 1914–1917, August 2018. CODEN ???? ISSN 2150-8097.

Li:2018:TST

[1980] Huan Li, Hua Lu, Feichao Shi, Gang Chen, Ke Chen, and Lidan Shou.

TRIPS: a system for translating raw indoor positioning data into visual mobility semantics. *Proceedings of the VLDB Endowment*, 11(12):1918–1921, August 2018. CODEN ???? ISSN 2150-8097.

Ke:2018:DPP

[1981] Xiangyu Ke, Michelle Teo, Arijit Khan, and Vijaya Krishna Yalavarthi. A demonstration of PERC: probabilistic entity resolution with crowd errors. *Proceedings of the VLDB Endowment*, 11(12):1922–1925, August 2018. CODEN ???? ISSN 2150-8097.

Li:2018:CCP

[1982] Guoliang Li, Chengliang Chai, Ju Fan, Xueping Weng, Jian Li, Yudian Zheng, Yuanbing Li, Xiang Yu, Xiaohang Zhang, and Haitao Yuan. CDB: a crowd-powered database system. *Proceedings of the VLDB Endowment*, 11 (12):1926–1929, August 2018. CODEN ???? ISSN 2150-8097.

Chandramouli:2018:FEC

[1983] Badrish Chandramouli, Guna Prasaad, Donald Kossmann, Justin Levandoski, James Hunter, and Mike Barnett. FASTER: an embedded concurrent key–value store for state management. *Proceedings of the VLDB Endowment*, 11(12):1930–1933, August 2018. CODEN ???? ISSN 2150-8097.

Zhang:2018:MSD

[1984] Gensheng Zhang and Chengkai Li. Maverick: a system for discovering exceptional facts from knowledge graphs. *Proceedings of the VLDB Endowment*, 11(12):1934–1937, August 2018. CODEN ???? ISSN 2150-8097.

Chen:2018:PPT

[1985] Lu Chen, Yunjun Gao, Zixian Liu, Xiaokui Xiao, Christian S. Jensen, and Yifan Zhu. PTrider: a price-and-time-aware ridesharing system. *Proceedings of the VLDB Endowment*, 11(12):1938–1941, August 2018. CODEN ???? ISSN 2150-8097.

Beheshti:2018:CKL

[1986] Amin Beheshti, Boualem Benatallah, Reza Nouri, and Alireza Tabebordbar. CoreKG: a knowledge lake service. *Proceedings of the VLDB Endowment*, 11 (12):1942–1945, August 2018. CODEN ???? ISSN 2150-8097.

Ortona:2018:RRD

[1987] Stefano Ortona, Venkata Vamsikrishna Meduri, and Paolo Papotti. RuDiK: rule discovery in knowledge bases. *Proceedings of the VLDB Endowment*, 11 (12):1946–1949, August 2018. CODEN ???? ISSN 2150-8097.

Papadakis:2018:RJE

[1988] George Papadakis, Leonidas Tsekouras, Emmanouil Thanos, George Giannakopoulos, Themis Palpanas, and Manolis Koubarakis. The return of jedAI: end-to-end entity resolution for structured and semi-structured data. *Proceedings of the VLDB Endowment*, 11(12):1950–1953, August 2018. CODEN ???? ISSN 2150-8097.

Lee:2018:PSA

[1989] Seokki Lee, Bertram Ludäscher, and Boris Glavic. Provenance summaries for answers and non-answers. *Proceedings of the VLDB Endowment*, 11(12): 1954–1957, August 2018. CODEN ???? ISSN 2150-8097.

Xin:2018:HEA

[1990] Doris Xin, Litian Ma, Jialin Liu, Stephen Macke, Shuchen Song, and Aditya Parameswaran. Helix: accelerating human-in-the-loop machine learning. *Proceedings of the VLDB Endowment*, 11(12):1958–1961, August 2018. CODEN ???? ISSN 2150-8097.

Siddiqui:2018:SFP

[1991] Tarique Siddiqui, Paul Luh, Zesheng Wang, Karrie Karahalios, and Aditya Parameswaran. Shapesearch: flexible pattern-based querying of trend line visualizations. *Proceedings of the VLDB Endowment*, 11(12):1962–1965, August 2018. CODEN ???? ISSN 2150-8097.

Xie:2018:PSP

[1992] Miao Xie, Sourav S Bhowmick, Hao Su, Gao Cong, and Wook-Shin Han. PANDA: a system for partial topology-based search on large networks. *Proceedings of the VLDB Endowment*, 11 (12):1966–1969, August 2018. CODEN ???? ISSN 2150-8097.

Lu:2018:MPT

[1993] Wei Lu, Xinyi Zhang, Zhiyu Shui, Zhe Peng, Xiao Zhang, Xiaoyong Du, Hao Huang, Xiaoyu Wang, Anqun Pan, and Haixiang Li. MSQL+: a plugin toolkit for similarity search under metric spaces in distributed relational database systems. *Proceedings of the VLDB Endowment*, 11(12):1970–1973, August 2018. CODEN ???? ISSN 2150-8097.

Sanghi:2018:HDB

[1994] Anupam Sanghi, Raghav Sood, Dharmendra Singh, Jayant R. Haritsa, and Srikanta Tirthapura. HYDRA: a dynamic big data regenerator. *Proceedings of the VLDB Endowment*, 11(12): 1974–1977, August 2018. CODEN ???? ISSN 2150-8097.

Jamour:2018:DMM

[1995] Fuad Jamour, Ibrahim Abdelaziz, and Panos Kalnis. A demonstration of MAGiQ: matrix algebra approach for solving RDF graph queries. *Proceedings of the VLDB Endowment*, 11(12): 1978–1981, August 2018. CODEN ???? ISSN 2150-8097.

Tan:2018:RRE

[1996] Wei Chit Tan, Meihui Zhang, Hazem Elmeleegy, and Divesh Srivastava. REGAL+: reverse engineering SPJA queries. *Proceedings of the VLDB Endowment*, 11(12):1982–1985, August 2018. CODEN ???? ISSN 2150-8097.

Deutch:2018:NNL

[1997] Daniel Deutch, Nave Frost, Amir Gilad, and Tomer Haimovich. NLProveNAns: natural language provenance for non-answers. *Proceedings of the VLDB Endowment*, 11(12):1986–1989, August 2018. CODEN ???? ISSN 2150-8097.

Xu:2018:FTD

[1998] Chen Xu, Rudi Poepsel Lemaitre, Juan Soto, and Volker Markl. Fault-tolerance for distributed iterative dataflows in action. *Proceedings of the VLDB Endowment*, 11(12):1990–1993, August 2018. CODEN ???? ISSN 2150-8097.

Abramovitz:2018:QQS

[1999] Efrat Abramovitz, Daniel Deutch, and Amir Gilad. QuestPro: queries in

SPARQL through provenance. *Proceedings of the VLDB Endowment*, 11(12): 1994–1997, August 2018. CODEN ???? ISSN 2150-8097.

Jarovsky:2018:GRS

[2000] Ariel Jarovsky, Tova Milo, Slava Novgorodov, and Wang-Chiew Tan. GOLDRUSH: rule sharing system for fraud detection. *Proceedings of the VLDB Endowment*, 11(12):1998–2001, August 2018. CODEN ???? ISSN 2150-8097.

Aebeloe:2018:DDP

[2001] Christian Aebeloe, Gabriela Montoya, Vinay Setty, and Katja Hose. Discovering diversified paths in knowledge bases. *Proceedings of the VLDB Endowment*, 11(12):2002–2005, August 2018. CODEN ???? ISSN 2150-8097.

Junghanns:2018:DDG

[2002] Martin Junghanns, Max Kießling, Niklas Teichmann, Kevin Gómez, André Petermann, and Erhard Rahm. Declarative and distributed graph analytics with GRADOOP. *Proceedings of the VLDB Endowment*, 11(12):2006–2009, August 2018. CODEN ???? ISSN 2150-8097.

Zhang:2018:CFT

[2003] J. W. Zhang, Yu Wang, and Y. C. Tay. A collaborative framework for tweaking properties in a synthetic dataset. *Proceedings of the VLDB Endowment*, 11 (12):2010–2013, August 2018. CODEN ???? ISSN 2150-8097.

Jammi:2018:TFI

[2004] Manasa Jammi, Jaydeep Sen, Ashish Mittal, Sagar Verma, Vardaan Pahuja, Rema Ananthanarayanan, Pranay Lohia, Hima Karanam, Diptikalyan Saha, and Karthik Sankaranarayanan. Tooling framework for instantiating natural language querying system. *Proceedings of the VLDB Endowment*, 11(12):2014–2017, August 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:KSS

[2005] Xiaolan Wang, Jiyu Komiya, Yoshihiko Suhara, Aaron Feng, Behzad Golshan, Alon Halevy, and Wang-Chiew Tan. Koko: a system for scalable semantic querying of text. *Proceedings of the VLDB Endowment*, 11(12):2018–2021, August 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:GGC

[2006] Jing Wang, Zichen Liu, Shuai Ma, Nikos Ntarmos, and Peter Triantafillou. GC: a graph caching system for subgraph/supergraph queries. *Proceedings of the VLDB Endowment*, 11(12): 2022–2025, August 2018. CODEN ???? ISSN 2150-8097.

Lissandrini:2018:XYP

[2007] Matteo Lissandrini, Davide Mottin, Yannis Velegrakis, and Themis Palpanas. X^2Q: your personal example-based graph explorer. *Proceedings of the VLDB Endowment*, 11(12):2026–2029, August 2018. CODEN ???? ISSN 2150-8097.

Chanial:2018:CFC

[2008] Camille Chanial, Rédouane Dziri, Helena Galhardas, Julien Leblay, Minh-Huong Le Nguyen, and Ioana Manolescu. Connectionlens: finding connections across heterogeneous data sources. *Proceedings of the VLDB Endowment*, 11(12):2030–2033, August 2018. CODEN ???? ISSN 2150-8097.

Senellart:2018:PPP

[2009] Pierre Senellart, Louis Jachiet, Silviu Maniu, and Yann Ramusat. ProvSQL: provenance and probability management in postgreSQL. *Proceedings of the VLDB Endowment*, 11(12):2034–2037, August 2018. CODEN ???? ISSN 2150-8097.

Shang:2018:CDC

[2010] Zechao Shang, Will Brackenbury, Aaron J. Elmore, and Michael J. Franklin. CYADB: a database that covers your ask. *Proceedings of the VLDB Endowment*, 11(12):2038–2041, August 2018. CODEN ???? ISSN 2150-8097.

Govind:2018:CHC

[2011] Yash Govind, Erik Paulson, Palaniappan Nagarajan, Paul Suganthan G. C., AnHai Doan, Youngchoon Park, Glenn M. Fung, Devin Conathan, Marshall Carter, and Mingju Sun. Cloudmatcher: a hands-off cloud/crowd service for entity matching. *Proceedings of the VLDB Endowment*, 11(12):2042–2045, August 2018. CODEN ???? ISSN 2150-8097.

Grulich:2018:CEC

[2012] Philipp M. Grulich and Faisal Nawab. Collaborative edge and cloud neural networks for real-time video processing. *Proceedings of the VLDB Endowment*, 11(12):2046–2049, August 2018. CODEN ???? ISSN 2150-8097.

Agrawal:2018:DAA

[2013] Ashvin Agrawal and Avrilia Floratou. Dhalion in action: automatic management of streaming applications. *Proceedings of the VLDB Endowment*, 11 (12):2050–2053, August 2018. CODEN ???? ISSN 2150-8097.

Karlas:2018:EMA

[2014] Bojan Karlas, Ji Liu, Wentao Wu, and Ce Zhang. Ease.ml in action: towards multi-tenant declarative learning services. *Proceedings of the VLDB Endowment*, 11(12):2054–2057, August 2018. CODEN ???? ISSN 2150-8097.

Neto:2018:MMC

[2015] Antonio Cavalcante Araujo Neto, Mario A. Nascimento, Joerg Sander, and Ricardo J. G. B. Campello. MustaCHE: a multiple clustering hierarchies explorer. *Proceedings of the VLDB Endowment*, 11(12):2058–2061, August 2018. CODEN ???? ISSN 2150-8097.

Salimi:2018:HDD

[2016] Babak Salimi, Corey Cole, Peter Li, Johannes Gehrke, and Dan Suciu. HypDB: a demonstration of detecting, explaining and resolving bias in OLAP queries. *Proceedings of the VLDB Endowment*, 11(12):2062–2065, August 2018. CODEN ???? ISSN 2150-8097.

Picado:2018:LEH

[2017] Jose Picado, Arash Termehchy, and Sudhanshu Pathak. Learning efficiently over heterogeneous databases. *Proceedings of the VLDB Endowment*, 11(12): 2066–2069, August 2018. CODEN ???? ISSN 2150-8097.

dosSantos:2018:SED

[2018] Walter dos Santos, Gustavo P. Avelar, Manoel Horta Ribeiro, Dorgival Guedes, and Wagner Meira. Scalable and efficient data analytics and mining with lemonade. *Proceedings of the VLDB Endowment*, 11(12):2070–2073, August 2018. CODEN ???? ISSN 2150-8097.

Trummer:2018:SRB

[2019] Immanuel Trummer, Samuel Moseley, Deepak Maram, Saehan Jo, and Joseph Antonakakis. SkinnerDB: regret-bounded query evaluation via reinforcement learning. *Proceedings of the VLDB Endowment*, 11(12):2074–2077, August 2018. CODEN ???? ISSN 2150-8097.

Vo:2018:ISD

[2020] Hoang Vo, Yanhui Liang, Jun Kong, and Fusheng Wang. iSPEED: a scalable and distributed in-memory based spatial query system for large and structurally complex 3D data. *Proceedings of the VLDB Endowment*, 11(12):2078–2081, August 2018. CODEN ???? ISSN 2150-8097.

Silva:2018:DRD

[2021] Vítor Silva, Daniel de Oliveira, Patrick Valduriez, and Marta Mattoso. DfAnalyzer: runtime dataflow analysis of scientific applications using provenance. *Proceedings of the VLDB Endowment*, 11(12):2082–2085, August 2018. CODEN ???? ISSN 2150-8097.

Hynes:2018:DSP

[2022] Nick Hynes, David Dao, David Yan, Raymond Cheng, and Dawn Song. A demonstration of Sterling: a privacy-preserving data marketplace. *Proceedings of the VLDB Endowment*, 11(12):2086–2089, August 2018. CODEN ???? ISSN 2150-8097.

Cao:2018:CCT

[2023] Yang Cao, Li Xiong, Masatoshi Yoshikawa, Yonghui Xiao, and Si Zhang. ConTPL: controlling temporal privacy leakage in differentially private continuous data release. *Proceedings of the VLDB Endowment*, 11(12):2090–2093, August 2018. CODEN ???? ISSN 2150-8097.

Dong:2018:DIM

[2024] Xin Luna Dong and Theodoros Rekatsinas. Data integration and machine learning: a natural synergy. *Proceedings of the VLDB Endowment*, 11(12):2094–2097, August 2018. CODEN ???? ISSN 2150-8097.

Maiyya:2018:DDC

[2025] Sujaya Maiyya, Victor Zakhary, Divyakant Agrawal, and Amr El Abbadi. Database and distributed computing fundamentals for scalable, fault-tolerant, and consistent maintenance of blockchains. *Proceedings of the VLDB Endowment*, 11(12):2098–2101, August 2018. CODEN ???? ISSN 2150-8097.

Faloutsos:2018:FBT

[2026] Christos Faloutsos, Jan Gasthaus, Tim Januschowski, and Yuyang Wang. Forecasting big time series: old and new. *Proceedings of the VLDB Endowment*, 11(12):2102–2105, August 2018. CODEN ???? ISSN 2150-8097.

Deutsch:2018:GDM

[2027] Alin Deutsch and Yannis Papakonstantinou. Graph data models, query languages and programming paradigms. *Proceedings of the VLDB Endowment*, 11(12):2106–2109, August 2018. CODEN ???? ISSN 2150-8097.

Cazalens:2018:CFC

[2028] Sylvie Cazalens, Julien Leblay, Philippe Lamarre, Ioana Manolescu, and Xavier Tannier. Computational fact checking: a content management perspective. *Proceedings of the VLDB Endow-*

ment, 11(12):2110–2113, August 2018. CODEN ???? ISSN 2150-8097.

Furtado:2018:IDM

[2029] Antonio L. Furtado and Nivio Ziviani. Information and data management at PUC-Rio and UFMG. *Proceedings of the VLDB Endowment*, 11(12):2114–2129, August 2018. CODEN ???? ISSN 2150-8097.

Miller:2018:ODI

[2030] Renée J. Miller. Open data integration. *Proceedings of the VLDB Endowment*, 11(12):2130–2139, August 2018. CODEN ???? ISSN 2150-8097.

Cafarella:2018:TYW

[2031] Michael Cafarella, Alon Halevy, Hongrae Lee, Jayant Madhavan, Cong Yu, Daisy Zhe Wang, and Eugene Wu. Ten years of WebTables. *Proceedings of the VLDB Endowment*, 11(12):2140–2149, August 2018. CODEN ???? ISSN 2150-8097.

Kraska:2018:NID

[2032] Tim Kraska. Northstar: an interactive data science system. *Proceedings of the VLDB Endowment*, 11(12):2150–2164, August 2018. CODEN ???? ISSN 2150-8097.

Stoyanovich:2018:PDD

[2033] Julia Stoyanovich, Bill Howe, HV Jagadish, and Gerome Miklau. Panel: a debate on data and algorithmic ethics. *Proceedings of the VLDB Endowment*, 11(12):2165–2167, August 2018. CODEN ???? ISSN 2150-8097.

Thomas:2018:CES

[2034] Anthony Thomas and Arun Kumar. A comparative evaluation of systems for scalable linear algebra-based analytics. *Proceedings of the VLDB Endowment*, 11(13):2168–2182, September 2018. CODEN ???? ISSN 2150-8097.

Karthik:2018:CPL

[2035] Srinivas Karthik, Jayant R. Haritsa, Sreyash Kenkre, and Vinayaka Pandit. A concave path to low-overhead robust query processing. *Proceedings of the VLDB Endowment*, 11(13):2183–2195, September 2018. CODEN ???? ISSN 2150-8097.

Wen:2018:ISE

[2036] Yuhao Wen, Xiaodan Zhu, Sudeepa Roy, and Jun Yang. Interactive summarization and exploration of top aggregate query answers. *Proceedings of the VLDB Endowment*, 11(13):2196–2208, September 2018. CODEN ???? ISSN 2150-8097.

Kersten:2018:EYA

[2037] Timo Kersten, Viktor Leis, Alfons Kemper, Thomas Neumann, Andrew Pavlo, and Peter Boncz. Everything you always wanted to know about compiled and vectorized queries but were afraid to ask. *Proceedings of the VLDB Endowment*, 11(13):2209–2222, September 2018. CODEN ???? ISSN 2150-8097.

Gao:2018:DTK

[2038] Junyang Gao, Pankaj K. Agarwal, and Jun Yang. Durable top-k queries on temporal data. *Proceedings of the VLDB Endowment*, 11(13):2223–2235, September 2018. CODEN ???? ISSN 2150-8097.

Linardi:2018:SVL

[2039] Michele Linardi and Themis Palpanas. Scalable, variable-length similarity search in data series: the ULISSE approach. *Proceedings of the VLDB Endowment*, 11(13):2236–2248, September 2018. CODEN ???? ISSN 2150-8097.

Sauer:2018:FLS

[2040] Caetano Sauer, Goetz Graefe, and Theo Härder. FineLine: log-structured transactional storage and recovery. *Proceedings of the VLDB Endowment*, 11(13):2249–2262, September 2018. CODEN ???? ISSN 2150-8097.

Rahman:2018:IMH

[2041] Protiva Rahman, Courtney Hebert, and Arnab Nandi. ICARUS: minimizing human effort in iterative data completion. *Proceedings of the VLDB Endowment*, 11(13):2263–2276, September 2018. CODEN ???? ISSN 2150-8097.

Kim:2018:LIW

[2042] Sunghwan Kim, Taesung Lee, Seung won Hwang, and Sameh Elnikety. List intersection for web search: algorithms, cost models, and optimizations. *Proceedings of the VLDB Endowment*, 12 (1):1–13, September 2018. CODEN ???? ISSN 2150-8097.

Whittaker:2018:ICC

[2043] Michael Whittaker and Joseph M. Hellerstein. Interactive checks for coordination avoidance. *Proceedings of the VLDB Endowment*, 12(1):14–27, September 2018. CODEN ???? ISSN 2150-8097.

Qin:2018:PPF

[2044] Jianbin Qin and Chuan Xiao. Pigeonring: a principle for faster thresholded similarity search. *Proceedings of the VLDB Endowment*, 12(1):28–42, September 2018. CODEN ???? ISSN 2150-8097.

Sariyuce:2018:LAH

[2045] Ahmet Erdem Sariyüce, C. Seshadhri, and Ali Pinar. Local algorithms for hierarchical dense subgraph discovery. *Proceedings of the VLDB Endowment*, 12(1):43–56, September 2018. CODEN ???? ISSN 2150-8097.

Yang:2018:CED

[2046] Jingru Yang, Ju Fan, Zhewei Wei, Guoliang Li, Tongyu Liu, and Xiaoyong Du. Cost-effective data annotation using game-based crowdsourcing. *Proceedings of the VLDB Endowment*, 12 (1):57–70, September 2018. CODEN ???? ISSN 2150-8097.

Huang:2018:OAL

[2047] Enhui Huang, Liping Peng, Luciano Di Palma, Ahmed Abdelkafi, Anna Liu, and Yanlei Diao. Optimization for active learning-based interactive database exploration. *Proceedings of the VLDB Endowment*, 12(1):71–84, September 2018. CODEN ???? ISSN 2150-8097.

Bleifuss:2018:ECN

[2048] Tobias Bleifuß, Leon Bornemann, Theodore Johnson, Dmitri V. Kalashnikov, Felix Naumann, and Divesh Srivastava. Exploring change: a new dimension of data analytics. *Proceedings of the VLDB Endowment*, 12(2):85–98, October 2018. CODEN ???? ISSN 2150-8097.

Ghosh:2018:FSS

[2049] Bishwamittra Ghosh, Mohammed Eunus Ali, Farhana M. Choudhury, Sajid Hasan Apon, Timos Sellis, and Jianxin Li. The flexible socio spatial group queries. *Proceedings of the VLDB Endowment*, 12(2):99–111, October 2018. CODEN ???? ISSN 2150-8097.

Echihabi:2018:LHD

[2050] Karima Echihabi, Kostas Zoumpatianos, Themis Palpanas, and Houda Benbrahim. The Lernaean Hydra of data series similarity search: an experimental evaluation of the state of the art. *Proceedings of the VLDB Endowment*, 12(2):112–127, October 2018. CODEN ???? ISSN 2150-8097.

Wang:2018:RML

[2051] Wei Wang, Jinyang Gao, Meihui Zhang, Sheng Wang, Gang Chen, Teck Khim Ng, Beng Chin Ooi, Jie Shao, and Moaz Reyad. Rafiki: machine learning as an analytics service system. *Proceedings of the VLDB Endowment*, 12(2):128–140, October 2018. CODEN ???? ISSN 2150-8097.

Subotic:2018:AIS

[2052] Pavle Subotić, Herbert Jordan, Lijun Chang, Alan Fekete, and Bernhard Scholz. Automatic index selection for large-scale datalog computation. *Proceedings of the VLDB Endowment*, 12 (2):141–153, October 2018. CODEN ???? ISSN 2150-8097.

Song:2018:SLF

[2053] Shuang Song, Xu Liu, Qinzhe Wu, Andreas Gerstlauer, Tao Li, and Lizy K. John. Start late, finish early: a distributed graph processing system with redundancy reduction. *Proceedings of the VLDB Endowment*, 12(2):154–168, October 2018. CODEN ???? ISSN 2150-8097.

Ding:2018:IOC

[2054] Bailu Ding, Lucja Kot, and Johannes Gehrke. Improving optimistic concurrency control through transaction batching and operation reordering. *Proceedings of the VLDB Endowment*, 12(2):169–182, October 2018. CODEN ???? ISSN 2150-8097.

Xie:2018:QLC

[2055] Ting Xie, Varun Chandola, and Oliver Kennedy. Query log compression for workload analytics. *Proceedings of the VLDB Endowment*, 12(3):183–196, November 2018. CODEN ???? ISSN 2150-8097.

Ali:2018:MTC

[2056] Mohammed Eunus Ali, Shadman Saqib Eusuf, Kaysar Abdullah, Farhana M. Choudhury, J. Shane Culpepper, and Timos Sellis. The maximum trajectory coverage query in spatial databases. *Proceedings of the VLDB Endowment*, 12(3):197–209, November 2018. CODEN ???? ISSN 2150-8097.

Wu:2018:TLO

[2057] Chenggang Wu, Alekh Jindal, Saeed Amizadeh, Hiren Patel, Wangchao Le, Shi Qiao, and Sriram Rao. Towards a learning optimizer for shared clouds. *Proceedings of the VLDB Endowment*, 12(3):210–222, November 2018. CODEN ???? ISSN 2150-8097.

Varma:2018:SAW

[2058] Paroma Varma and Christopher Ré. Snuba: automating weak supervision to label training data. *Proceedings of the VLDB Endowment*, 12(3):223–236, November 2018. CODEN ???? ISSN 2150-8097.

Asudeh:2018:OSR

[2059] Abolfazl Asudeh, H. V. Jagadish, Gerome Miklau, and Julia Stoyanovich. On obtaining stable rankings. *Proceedings of the VLDB Endowment*, 12 (3):237–250, November 2018. CODEN ???? ISSN 2150-8097.

Ji:2018:PTB

[2060] Shuping Ji and Hans-Arno Jacobsen. PS-tree-based efficient Boolean expression matching for high-dimensional and dense workloads. *Proceedings of the VLDB Endowment*, 12(3):251–264, November 2018. CODEN ???? ISSN 2150-8097.

Yan:2018:SMR

[2061] Yizhou Yan, Lei Cao, Samuel Madden, and Elke A. Rundensteiner. SWIFT: mining representative patterns from large event streams. *Proceedings of the VLDB Endowment*, 12(3):265–277, November 2018. CODEN ???? ISSN 2150-8097.

C:2018:SSS

[2062] Paul Suganthan G. C., Adel Ardalan, AnHai Doan, and Aditya Akella. Smurf: self-service string matching using random forests. *Proceedings of the VLDB Endowment*, 12(3):278–291, November 2018. CODEN ???? ISSN 2150-8097.

Liu:2018:CSD

[2063] Feilong Liu, Ario Salmasi, Spyros Blanas, and Anastasios Sidiropoulos. Chasing similarity: distribution-aware aggregation scheduling. *Proceedings of the VLDB Endowment*, 12(3):292–306, November 2018. CODEN ???? ISSN 2150-8097.

Bater:2018:SES

[2064] Johes Bater, Xi He, William Ehrich, Ashwin Machanavajjhala, and Jennie Rogers. Shrinkwrap: efficient SQL query processing in differentially private data federations. *Proceedings of the VLDB Endowment*, 12(3):307–320, November 2018. CODEN ???? ISSN 2150-8097.

Gill:2018:SPP

[2065] Gurbinder Gill, Roshan Dathathri, Loc Hoang, and Keshav Pingali. A study of partitioning policies for graph analytics on large-scale distributed platforms. *Proceedings of the VLDB Endowment*, 12(4):321–334, December 2018. CODEN ???? ISSN 2150-8097.

Kumar:2018:UDG

[2066] K. Ashwin Kumar and Petros Efstathopoulos. Utility-driven graph summarization. *Proceedings of the VLDB Endowment*, 12(4):335–347, December 2018. CODEN ???? ISSN 2150-8097.

Kara:2018:CCS

[2067] Kaan Kara, Ken Eguro, Ce Zhang, and Gustavo Alonso. ColumnML: column-store machine learning with on-the-fly data transformation. *Proceedings of the VLDB Endowment*, 12(4):348–361, December 2018. CODEN ???? ISSN 2150-8097.

Li:2018:CED

[2068] Yanying Li, Haipei Sun, Boxiang Dong, and Hui (Wendy) Wang. Cost-efficient data acquisition on online data marketplaces for correlation analysis. *Proceedings of the VLDB Endowment*, 12(4): 362–375, December 2018. CODEN ???? ISSN 2150-8097.

Dolatshah:2018:CCL

[2069] Mohamad Dolatshah, Mathew Teoh, Jiannan Wang, and Jian Pei. Cleaning crowdsourced labels using oracles for statistical classification. *Proceedings of the VLDB Endowment*, 12(4):376–389, December 2018. CODEN ???? ISSN 2150-8097.

Lissandrini:2018:BMM

[2070] Matteo Lissandrini, Martin Brugnara, and Yannis Velegrakis. Beyond macrobenchmarks: microbenchmark-based graph database evaluation. *Proceedings of the VLDB Endowment*, 12(4): 390–403, December 2018. CODEN ???? ISSN 2150-8097.

Balegas:2018:IIP

[2071] Valter Balegas, Sérgio Duarte, Carla Ferreira, Rodrigo Rodrigues, and Nuno Preguiça. IPA: invariant-preserving applications for weakly consistent replicated databases. *Proceedings of the VLDB Endowment*, 12(4):404–418, December 2018. CODEN ???? ISSN 2150-8097.

Abuzaid:2018:DRI

[2072] Firas Abuzaid, Peter Kraft, Sahaana Suri, Edward Gan, Eric Xu, Atul Shenoy, Asvin Ananthanarayan, John Sheu, Erik Meijer, Xi Wu, Jeff Naughton, Peter Bailis, and Matei Zaharia. DIFF: a relational interface for large-scale data explanation. *Proceedings of the VLDB Endowment*, 12(4): 419–432, December 2018. CODEN ???? ISSN 2150-8097.

Basat:2018:SFI

[2073] Ran Ben Basat, Roy Friedman, and Rana Shahout. Stream frequency over interval queries. *Proceedings of the VLDB Endowment*, 12(4):433–445, December 2018. CODEN ???? ISSN 2150-8097.

Xin:2018:HHO

[2074] Doris Xin, Stephen Macke, Litian Ma, Jialin Liu, Shuchen Song, and Aditya Parameswaran. HELIX: holistic optimization for accelerating iterative machine learning. *Proceedings of the VLDB Endowment*, 12(4):446–460, December 2018. CODEN ???? ISSN 2150-8097.

Fu:2019:FAN

[2075] Cong Fu, Chao Xiang, Changxu Wang, and Deng Cai. Fast approximate nearest neighbor search with the navigating spreading-out graph. *Proceedings of the VLDB Endowment*, 12(5):461–474, January 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:DRF

[2076] Qi Wang and Torsten Suel. Document reordering for faster intersection. *Proceedings of the VLDB Endowment*, 12 (5):475–487, January 2019. CODEN ???? ISSN 2150-8097.

Zhang:2019:CCS

[2077] Xiaofei Zhang and M. Tamer Özsu. Correlation constraint shortest path over large multi-relation graphs. *Proceedings of the VLDB Endowment*, 12 (5):488–501, January 2019. CODEN ???? ISSN 2150-8097.

Lang:2019:POF

[2078] Harald Lang, Thomas Neumann, Alfons Kemper, and Peter Boncz. Performance-optimal filtering: Bloom overtakes Cuckoo at high throughput. *Proceedings of the VLDB Endowment*, 12(5):502–515, January 2019. CODEN ???? ISSN 2150-8097.

Zeuch:2019:AES

[2079] Steffen Zeuch, Bonaventura Del Monte, Jeyhun Karimov, Clemens Lutz, Manuel Renz, Jonas Traub, Sebastian Breß, Tilmann Rabl, and Volker Markl. Analyzing efficient stream processing on modern hardware. *Proceedings of the VLDB Endowment*, 12(5):516–530, January 2019. CODEN ???? ISSN 2150-8097.

Luo:2019:EDI

[2080] Chen Luo and Michael J. Carey. Efficient data ingestion and query processing for LSM-based storage systems. *Proceedings of the VLDB Endowment*, 12(5):531–543, January 2019. CODEN ???? ISSN 2150-8097.

Chrysogelos:2019:HEH

[2081] Periklis Chrysogelos, Manos Karpathiotakis, Raja Appuswamy, and Anastasia Ailamaki. HetExchange: encapsulating heterogeneous CPU–GPU parallelism in JIT compiled engines. *Proceedings of the VLDB Endowment*, 12(5):544–556, January 2019. CODEN ???? ISSN 2150-8097.

Atzeni:2019:MMS

[2082] Paolo Atzeni, Luigi Bellomarini, Paolo Papotti, and Riccardo Torlone. Meta-mappings for schema mapping reuse. *Proceedings of the VLDB Endowment*, 12(5):557–569, January 2019. CODEN ???? ISSN 2150-8097.

Xu:2019:EEG

[2083] Lijie Xu, Tian Guo, Wensheng Dou, Wei Wang, and Jun Wei. An experimental evaluation of garbage collectors on big data applications. *Proceedings of the VLDB Endowment*, 12(5):570–583, January 2019. CODEN ???? ISSN 2150-8097.

Guo:2019:AOC

[2084] Jinwei Guo, Peng Cai, Jiahao Wang, Weining Qian, and Aoying Zhou. Adaptive optimistic concurrency control for heterogeneous workloads. *Proceedings of the VLDB Endowment*, 12 (5):584–596, January 2019. CODEN ???? ISSN 2150-8097.

Lin:2019:MTC

[2085] Yu-Shan Lin, Shao-Kan Pi, Meng-Kai Liao, Ching Tsai, Aaron Elmore, and Shan-Hung Wu. MgCrab: transaction crabbing for live migration in deterministic database systems. *Proceedings of the VLDB Endowment*, 12(5):597–610, January 2019. CODEN ???? ISSN 2150-8097.

Maiyya:2019:UCA

[2086] Sujaya Maiyya, Faisal Nawab, Divyakant Agrawal, and Amr El Abbadi. Unifying consensus and atomic commitment for effective cloud data management. *Proceedings of the VLDB Endowment*, 12(5):611–623, January 2019. CODEN ???? ISSN 2150-8097. See errata [2576].

Wu:2019:ATC

[2087] Chenggang Wu, Vikram Sreekanti, and Joseph M. Hellerstein. Autoscaling tiered cloud storage in Anna. *Proceedings of the VLDB Endowment*, 12(6): 624–638, February 2019. CODEN ???? ISSN 2150-8097.

Dignos:2019:SST

[2088] Anton Dignös, Boris Glavic, Xing Niu, Michael Böhlen, and Johann Gamper. Snapshot semantics for temporal multiset relations. *Proceedings of the VLDB Endowment*, 12(6):639–652, February 2019. CODEN ???? ISSN 2150-8097.

Kwashie:2019:CEE

[2089] Selasi Kwashie, Lin Liu, Jixue Liu, Markus Stumptner, Jiuyong Li, and Lujing Yang. Certus: an effective entity resolution approach with graph differential dependencies (GDDs). *Proceedings of the VLDB Endowment*, 12(6): 653–666, February 2019. CODEN ???? ISSN 2150-8097.

Han:2019:EEA

[2090] Kai Han, Fei Gui, Xiaokui Xiao, Jing Tang, Yuntian He, Zongmai Cao, and He Huang. Efficient and effective algorithms for clustering uncertain graphs. *Proceedings of the VLDB Endowment*, 12(6):667–680, February 2019. CODEN ???? ISSN 2150-8097.

Zou:2019:PMD

[2091] Jia Zou, Arun Iyengar, and Chris Jermaine. Pangea: monolithic distributed storage for data analytics. *Proceedings of the VLDB Endowment*, 12(6): 681–694, February 2019. CODEN ???? ISSN 2150-8097.

Fan:2019:SMD

[2092] Zhiwei Fan, Jianqiao Zhu, Zuyu Zhang, Aws Albarghouthi, Paraschos Koutris, and Jignesh M. Patel. Scaling-up in-memory datalog processing: observations and techniques. *Proceedings of the VLDB Endowment*, 12(6):695–708, February 2019. CODEN ???? ISSN 2150-8097.

Archer:2019:CAL

[2093] Aaron Archer, Kevin Aydin, Mohammad Hossein Bateni, Vahab Mirrokni, Aaron Schild, Ray Yang, and Richard Zhuang. Cache-aware load balancing of data center applications. *Proceedings of the VLDB Endowment*, 12(6):709–723, February 2019. CODEN ???? ISSN 2150-8097.

Borkowski:2019:MCR

[2094] Michael Borkowski, Christoph Hochreiner, and Stefan Schulte. Minimizing cost by reducing scaling operations in distributed stream processing. *Proceedings of the VLDB Endowment*, 12(7): 724–737, March 2019. CODEN ???? ISSN 2150-8097.

Wu:2019:PPB

[2095] Yinjun Wu, Abdussalam Alawini, Daniel Deutch, Tova Milo, and Susan Davidson. ProvCite: provenance-based data citation. *Proceedings of the VLDB Endowment*, 12(7):738–751, March 2019. CODEN ???? ISSN 2150-8097.

Fan:2019:DCF

[2096] Wenfei Fan, Ping Lu, Chao Tian, and Jingren Zhou. Deducing certain fixes to graphs. *Proceedings of the VLDB Endowment*, 12(7):752–765, March 2019. CODEN ???? ISSN 2150-8097.

Ceccarello:2019:SCC

[2097] Matteo Ceccarello, Andrea Pietracaprina, and Geppino Pucci. Solving

k-center clustering (with outliers) in MapReduce and streaming, almost as accurately as sequentially. *Proceedings of the VLDB Endowment*, 12(7):766–778, March 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:EED

[2098] Xiaolan Wang and Alexandra Meliou. Explain3D: explaining disagreements in disjoint datasets. *Proceedings of the VLDB Endowment*, 12(7):779–792, March 2019. CODEN ???? ISSN 2150-8097.

Won:2019:DDS

[2099] Youjip Won, Sundoo Kim, Juseong Yun, Dam Quang Tuan, and Jiwon Seo. DASH: database shadowing for mobile DBMS. *Proceedings of the VLDB Endowment*, 12(7):793–806, March 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:AGL

[2100] Zeke Wang, Kaan Kara, Hantian Zhang, Gustavo Alonso, Onur Mutlu, and Ce Zhang. Accelerating generalized linear models with MLWeaving: a one-size-fits-all system for any-precision learning. *Proceedings of the VLDB Endowment*, 12(7):807–821, March 2019. CODEN ???? ISSN 2150-8097.

Jankov:2019:DRC

[2101] Dimitrije Jankov, Shangyu Luo, Binhang Yuan, Zhuhua Cai, Jia Zou, Chris Jermaine, and Zekai J. Gao. Declarative recursive computation on an RDBMS: or, why you should use a database for distributed machine learning. *Proceedings of the VLDB Endowment*, 12(7):822–835, March 2019. CODEN ???? ISSN 2150-8097.

Ghandeharizadeh:2019:DIE

[2102] Shahram Ghandeharizadeh and Hieu Nguyen. Design, implementation, and evaluation of write-back policy with cache augmented data stores. *Proceedings of the VLDB Endowment*, 12(8): 836–849, April 2019. CODEN ???? ISSN 2150-8097.

Nguyen:2019:UGE

[2103] Thanh Tam Nguyen, Matthias Weidlich, Hongzhi Yin, Bolong Zheng, Quoc Viet Hung Nguyen, and Bela Stantic. User guidance for efficient fact checking. *Proceedings of the VLDB Endowment*, 12(8):850–863, April 2019. CODEN ???? ISSN 2150-8097.

Ke:2019:DCR

[2104] Xiangyu Ke, Arijit Khan, and Leroy Lim Hong Quan. An in-depth comparison of s–t reliability algorithms over uncertain graphs. *Proceedings of the VLDB Endowment*, 12(8):864–876, April 2019. CODEN ???? ISSN 2150-8097.

Fan:2019:DSP

[2105] Wenfei Fan, Chunming Hu, Muyang Liu, Ping Lu, Qiang Yin, and Jingren Zhou. Dynamic scaling for parallel graph computations. *Proceedings of the VLDB Endowment*, 12(8):877–890, April 2019. CODEN ???? ISSN 2150-8097.

Li:2019:TTR

[2106] Dongsheng Li, Yiming Zhang, Jinyan Wang, and Kian-Lee Tan. TopoX: topology refactorization for efficient graph partitioning and processing. *Proceedings of the VLDB Endowment*, 12 (8):891–905, April 2019. CODEN ???? ISSN 2150-8097.

Avdiukhin:2019:MDB

[2107] Dmitrii Avdiukhin, Sergey Pupyrev, and Grigory Yaroslavtsev. Multi-dimensional balanced graph partitioning via projected gradient descent. *Proceedings of the VLDB Endowment*, 12 (8):906–919, April 2019. CODEN ???? ISSN 2150-8097.

Cao:2019:EDS

[2108] Lei Cao, Yizhou Yan, Samuel Madden, Elke A. Rundensteiner, and Mathan Gopalsamy. Efficient discovery of sequence outlier patterns. *Proceedings of the VLDB Endowment*, 12(8):920–932, April 2019. CODEN ???? ISSN 2150-8097.

Bogatov:2019:CEO

[2109] Dmytro Bogatov, George Kollios, and Leonid Reyzin. A comparative evaluation of order-revealing encryption schemes and secure range-query protocols. *Proceedings of the VLDB Endowment*, 12(8):933–947, April 2019. CODEN ???? ISSN 2150-8097.

Orakzai:2019:HFM

[2110] Faisal Orakzai, Toon Calders, and Torben Bach Pedersen. $k/2$-hop: fast mining of convoy patterns with effective pruning. *Proceedings of the VLDB Endowment*, 12(9):948–960, May 2019. CODEN ???? ISSN 2150-8097.

Sun:2019:BAD

[2111] Ji Sun, Zeyuan Shang, Guoliang Li, Dong Deng, and Zhifeng Bao. Balance-aware distributed string similarity-based query processing system. *Proceedings of the VLDB Endowment*, 12 (9):961–974, May 2019. CODEN ???? ISSN 2150-8097.

Ruan:2019:FGS

[2112] Pingcheng Ruan, Gang Chen, Tien Tuan Anh Dinh, Qian Lin, Beng Chin Ooi, and Meihui Zhang. Fine-grained, secure and efficient data provenance on blockchain systems. *Proceedings of the VLDB Endowment*, 12(9):975–988, May 2019. CODEN ???? ISSN 2150-8097.

Choi:2019:PTK

[2113] Dalsu Choi, Chang-Sup Park, and Yon Dohn Chung. Progressive top-k subarray query processing in array databases. *Proceedings of the VLDB Endowment*, 12(9):989–1001, May 2019. CODEN ???? ISSN 2150-8097.

Hoffmann:2019:MLC

[2114] Moritz Hoffmann, Andrea Lattuada, and Frank McSherry. Megaphone: latency-conscious state migration for distributed streaming dataflows. *Proceedings of the VLDB Endowment*, 12 (9):1002–1015, May 2019. CODEN ???? ISSN 2150-8097.

Tam:2019:ADR

[2115] Nguyen Thanh Tam, Matthias Weidlich, Bolong Zheng, Hongzhi Yin, Nguyen Quoc Viet Hung, and Bela Stantic. From anomaly detection to rumour detection using data streams of social platforms. *Proceedings of the VLDB Endowment*, 12(9):1016–1029, May 2019. CODEN ???? ISSN 2150-8097.

Gupta:2019:OIT

[2116] Peeyush Gupta, Yin Li, Sharad Mehrotra, Nisha Panwar, Shantanu Sharma, and Sumaya Almanee. Obscure:

information-theoretic oblivious and verifiable aggregation queries. *Proceedings of the VLDB Endowment*, 12(9): 1030–1043, May 2019. CODEN ???? ISSN 2150-8097.

Dutt:2019:SER

[2117] Anshuman Dutt, Chi Wang, Azade Nazi, Srikanth Kandula, Vivek Narasayya, and Surajit Chaudhuri. Selectivity estimation for range predicates using lightweight models. *Proceedings of the VLDB Endowment*, 12(9):1044–1057, May 2019. CODEN ???? ISSN 2150-8097.

Yuan:2019:CSP

[2118] Ye Yuan, Xiang Lian, Guoren Wang, Yuliang Ma, and Yishu Wang. Constrained shortest path query in a large time-dependent graph. *Proceedings of the VLDB Endowment*, 12(10):1058–1070, June 2019. CODEN ???? ISSN 2150-8097.

Chu:2019:FTC

[2119] Lingyang Chu, Zhefeng Wang, Jian Pei, Yanyan Zhang, Yu Yang, and Enhong Chen. Finding theme communities from database networks. *Proceedings of the VLDB Endowment*, 12(10): 1071–1084, June 2019. CODEN ???? ISSN 2150-8097.

Pan:2019:RSB

[2120] James J. Pan, Guoliang Li, and Juntao Hu. Ridesharing: simulator, benchmark, and evaluation. *Proceedings of the VLDB Endowment*, 12(10):1085–1098, June 2019. CODEN ???? ISSN 2150-8097.

Lai:2019:DSM

[2121] Longbin Lai, Zhu Qing, Zhengyi Yang, Xin Jin, Zhengmin Lai, Ran Wang, Kongzhang Hao, Xuemin Lin, Lu Qin, Wenjie Zhang, Ying Zhang, Zhengping Qian, and Jingren Zhou. Distributed subgraph matching on timely dataflow. *Proceedings of the VLDB Endowment*, 12(10):1099–1112, June 2019. CODEN ???? ISSN 2150-8097.

Qiao:2019:HDS

[2122] Shi Qiao, Adrian Nicoara, Jin Sun, Marc Friedman, Hiren Patel, and Jaliya Ekanayake. Hyper dimension shuffle: efficient data repartition at petabyte scale in SCOPE. *Proceedings of the VLDB Endowment*, 12(10):1113–1125, June 2019. CODEN ???? ISSN 2150-8097.

Cormode:2019:ARQ

[2123] Graham Cormode, Tejas Kulkarni, and Divesh Srivastava. Answering range queries under local differential privacy. *Proceedings of the VLDB Endowment*, 12(10):1126–1138, June 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:VPB

[2124] Kai Wang, Xuemin Lin, Lu Qin, Wenjie Zhang, and Ying Zhang. Vertex priority based butterfly counting for large-scale bipartite networks. *Proceedings of the VLDB Endowment*, 12(10):1139–1152, June 2019. CODEN ???? ISSN 2150-8097.

Cao:2019:BVS

[2125] Yang Cao, Wenfei Fan, and Tengfei Yuan. Block as a value for SQL over NoSQL. *Proceedings of the VLDB Endowment*, 12(10):1153–1166, June 2019. CODEN ???? ISSN 2150-8097.

Tangwongsan:2019:OGO

[2126] Kanat Tangwongsan, Martin Hirzel, and Scott Schneider. Optimal and general out-of-order sliding-window aggregation. *Proceedings of the VLDB Endowment*, 12(10):1167–1180, June 2019. CODEN ???? ISSN 2150-8097.

Tang:2019:CTR

[2127] Bo Tang, Kyriakos Mouratidis, Man Lung Yiu, and Zhenyu Chen. Creating top ranking options in the continuous option and preference space. *Proceedings of the VLDB Endowment*, 12(10):1181–1194, June 2019. CODEN ???? ISSN 2150-8097.

Ma:2019:OBE

[2128] Hanchao Ma, Morteza Alipourlangouri, Yinghui Wu, Fei Chiang, and Jiaxing Pi. Ontology-based entity matching in attributed graphs. *Proceedings of the VLDB Endowment*, 12(10):1195–1207, June 2019. CODEN ???? ISSN 2150-8097.

Chen:2019:RTD

[2129] Lu Chen, Yunjun Gao, Ziquan Fang, Xiaoye Miao, Christian S. Jensen, and Chenjuan Guo. Real-time distributed co-movement pattern detection on streaming trajectories. *Proceedings of the VLDB Endowment*, 12(10): 1208–1220, June 2019. CODEN ???? ISSN 2150-8097.

Tan:2019:IIB

[2130] Jian Tan, Tieying Zhang, Feifei Li, Jie Chen, Qixing Zheng, Ping Zhang, Honglin Qiao, Yue Shi, Wei Cao, and Rui Zhang. iBTune: individualized buffer tuning for large-scale cloud databases. *Proceedings of the VLDB Endowment*, 12(10):1221–1234, June 2019. CODEN ???? ISSN 2150-8097.

Whittaker:2019:OTI

[2131] Michael Whittaker, Nick Edmonds, Sandeep Tata, James B. Wendt, and Marc Najork. Online template induction for machine-generated emails. *Proceedings of the VLDB Endowment*, 12 (11):1235–1248, July 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:QSP

[2132] Yong Wang, Guoliang Li, and Nan Tang. Querying shortest paths on time dependent road networks. *Proceedings of the VLDB Endowment*, 12(11):1249–1261, July 2019. CODEN ???? ISSN 2150-8097.

Fariha:2019:EDQ

[2133] Anna Fariha and Alexandra Meliou. Example-driven query intent discovery: abductive reasoning using semantic similarity. *Proceedings of the VLDB Endowment*, 12(11):1262–1275, July 2019. CODEN ???? ISSN 2150-8097.

Zhou:2019:AVQ

[2134] Qi Zhou, Joy Arulraj, Shamkant Navathe, William Harris, and Dong Xu. Automated verification of query equivalence using satisfiability modulo theories. *Proceedings of the VLDB Endowment*, 12(11):1276–1288, July 2019. CODEN ???? ISSN 2150-8097.

Xu:2019:TUF

[2135] Pengfei Xu and Jiaheng Lu. Towards a unified framework for string similarity joins. *Proceedings of the VLDB Endowment*, 12(11):1289–1302, July 2019. CODEN ???? ISSN 2150-8097.

Yoon:2019:NEF

[2136] Susik Yoon, Jae-Gil Lee, and Byung Suk Lee. NETS: extremely fast outlier detection from a data stream via set-based processing. *Proceedings of the VLDB Endowment*, 12(11):1303–1315, July 2019. CODEN ???? ISSN 2150-8097.

Lu:2019:SST

[2137] Yi Lu, Xiangyao Yu, and Samuel Madden. STAR: scaling transactions through asymmetric replication. *Proceedings of the VLDB Endowment*, 12 (11):1316–1329, July 2019. CODEN ???? ISSN 2150-8097.

Li:2019:SD

[2138] Yuliang Li, Aaron Feng, Jinfeng Li, Saran Mumick, Alon Halevy, Vivian Li, and Wang-Chiew Tan. Subjective databases. *Proceedings of the VLDB Endowment*, 12(11):1330–1343, July 2019. CODEN ???? ISSN 2150-8097.

Ren:2019:FRD

[2139] Xuguang Ren, Junhu Wang, Wook-Shin Han, and Jeffrey Xu Yu. Fast and robust distributed subgraph enumeration. *Proceedings of the VLDB Endowment*, 12(11):1344–1356, July 2019. CODEN ???? ISSN 2150-8097.

Fu:2019:EEL

[2140] Fangeheng Fu, Jiawei Jiang, Yingxia Shao, and Bin Cui. An experimental evaluation of large scale GBDT systems. *Proceedings of the VLDB Endowment*, 12(11):1357–1370, July 2019. CODEN ???? ISSN 2150-8097.

Kotsogiannis:2019:PDP

[2141] Ios Kotsogiannis, Yuchao Tao, Xi He, Maryam Fanaeepour, Ashwin Machanavajjhala, Michael Hay, and Gerome Miklau. PrivateSQL: a differentially private SQL query engine. *Proceedings of the VLDB Endowment*, 12(11):1371–1384, July 2019. CODEN ???? ISSN 2150-8097.

Amiri:2019:CCA

[2142] Mohammad Javad Amiri, Divyakant Agrawal, and Amr El Abbadi. CAPER: a cross-application permissioned blockchain. *Proceedings of the VLDB Endowment*, 12(11):1385–1398, July 2019. CODEN ???? ISSN 2150-8097.

Koliousis:2019:CSD

[2143] Alexandros Koliousis, Pijika Watcharapichat, Matthias Weidlich, Luo Mai, Paolo Costa, and Peter Pietzuch. Crossbow: scaling deep learning with small batch sizes on multi-GPU servers. *Proceedings of the VLDB Endowment*, 12(11):1399–1412, July 2019. CODEN ???? ISSN 2150-8097.

Feng:2019:FAA

[2144] Kaiyu Feng, Gao Cong, Christian S. Jensen, and Tao Guo. Finding attribute-aware similar regions for data analysis. *Proceedings of the VLDB Endowment*, 12(11):1414–1426, July 2019. CODEN ???? ISSN 2150-8097.

Tang:2019:IQP

[2145] Dixin Tang, Zechao Shang, Aaron J. Elmore, Sanjay Krishnan, and Michael J. Franklin. Intermittent query processing. *Proceedings of the VLDB Endowment*, 12(11):1427–1441, July 2019. CODEN ???? ISSN 2150-8097.

Budiu:2019:HTC

[2146] Mihai Budiu, Parikshit Gopalan, Lalith Suresh, Udi Wieder, Han Kruiger, and Marcos K. Aguilera. Hillview: a trillion-cell spreadsheet for big data. *Proceedings of the VLDB Endowment*, 12(11):1442–1457, July 2019. CODEN ???? ISSN 2150-8097.

Wei:2019:EFD

[2147] Ziheng Wei and Sebastian Link. Embedded functional dependencies and data-completeness tailored database design. *Proceedings of the VLDB Endowment*, 12(11):1458–1470, July 2019. CODEN ???? ISSN 2150-8097.

Fan:2019:OVG

[2148] Hua Fan and Wojciech Golab. Ocean Vista: gossip-based visibility control for speedy geo-distributed transactions. *Proceedings of the VLDB Endowment*, 12(11):1471–1484, July 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:INF

[2149] Xikui Wang and Michael J. Carey. An IDEA: an ingestion framework for data enrichment in asterixDB. *Proceedings of the VLDB Endowment*, 12(11):1485–1498, July 2019. CODEN ???? ISSN 2150-8097.

Karyakin:2019:DMP

[2150] Alexey Karyakin and Kenneth Salem. DimmStore: memory power optimization for database systems. *Proceedings of the VLDB Endowment*, 12(11):1499–1512, July 2019. CODEN ???? ISSN 2150-8097.

Yan:2019:GAS

[2151] Cong Yan and Alvin Cheung. Generating application-specific data layouts for in-memory databases. *Proceedings of the VLDB Endowment*, 12(11):1513–1525, July 2019. CODEN ???? ISSN 2150-8097.

Hai:2019:RPT

[2152] Rihan Hai and Christoph Quix. Rewriting of plain SO tgds into nested tgds. *Proceedings of the VLDB Endowment*, 12(11):1526–1538, July 2019. CODEN ???? ISSN 2150-8097.

Nathan:2019:BMD

[2153] Senthil Nathan, Chander Govindarajan, Adarsh Saraf, Manish Sethi, and Praveen Jayachandran. Blockchain meets database: design and implementation of a blockchain relational database. *Proceedings of the VLDB Endowment*, 12(11):1539–1552, July 2019. CODEN ???? ISSN 2150-8097.

Kunft:2019:IRO

[2154] Andreas Kunft, Asterios Katsifodimos, Sebastian Schelter, Sebastian Breß, Tilmann Rabl, and Volker Markl. An intermediate representation for optimizing machine learning pipelines. *Proceedings of the VLDB Endowment*, 12 (11):1553–1567, July 2019. CODEN ???? ISSN 2150-8097.

Fang:2019:ARD

[2155] Yuanwei Fang, Chen Zou, and Andrew A. Chien. Accelerating raw data analysis with the ACCORDA software and hardware architecture. *Proceedings of the VLDB Endowment*, 12(11):1568–1582, July 2019. CODEN ???? ISSN 2150-8097.

Siddique:2019:CST

[2156] A. B. Siddique, Ahmed Eldawy, and Vagelis Hristidis. Comparing synopsis techniques for approximate spatial data analysis. *Proceedings of the VLDB Endowment*, 12(11):1583–1596, July 2019. CODEN ???? ISSN 2150-8097.

El-Hindi:2019:BSD

[2157] Muhammad El-Hindi, Carsten Binnig, Arvind Arasu, Donald Kossmann, and Ravi Ramamurthy. BlockchainDB: a shared database on blockchains. *Proceedings of the VLDB Endowment*, 12 (11):1597–1609, July 2019. CODEN ???? ISSN 2150-8097.

Jia:2019:ETS

[2158] Ruoxi Jia, David Dao, Boxin Wang, Frances Ann Hubis, Nezihe Merve Gurel, Bo Li, Ce Zhang, Costas Spanos, and Dawn Song. Efficient task-specific data valuation for nearest neighbor algorithms. *Proceedings of the VLDB Endowment*, 12(11):1610–1623, July 2019. CODEN ???? ISSN 2150-8097.

Saxena:2019:DID

[2159] Hemant Saxena, Lukasz Golab, and Ihab F. Ilyas. Distributed implementations of dependency discovery algorithms. *Proceedings of the VLDB Endowment*, 12(11):1624–1636, July 2019. CODEN ???? ISSN 2150-8097.

Zamanian:2019:RDH

[2160] Erfan Zamanian, Xiangyao Yu, Michael Stonebraker, and Tim Kraska. Rethinking database high availability with RDMA networks. *Proceedings of the VLDB Endowment*, 12(11):1637–1650, July 2019. CODEN ???? ISSN 2150-8097.

Bressan:2019:MFM

[2161] Marco Bressan, Stefano Leucci, and Alessandro Panconesi. Motivo: fast motif counting via succinct color coding and adaptive sampling. *Proceedings of the VLDB Endowment*, 12(11):1651–1663, July 2019. CODEN ???? ISSN 2150-8097.

Poddar:2019:AED

[2162] Rishabh Poddar, Tobias Boelter, and Raluca Ada Popa. Arx: an encrypted database using semantically secure encryption. *Proceedings of the VLDB Endowment*, 12(11):1664–1678, July 2019. CODEN ???? ISSN 2150-8097.

Gao:2019:EKG

[2163] Junyang Gao, Xian Li, Yifan Ethan Xu, Bunyamin Sisman, Xin Luna Dong, and Jun Yang. Efficient knowledge graph accuracy evaluation. *Proceedings of the VLDB Endowment*, 12 (11):1679–1691, July 2019. CODEN ???? ISSN 2150-8097.

Mhedhbi:2019:OSQ

[2164] Amine Mhedhbi and Semih Salihoglu. Optimizing subgraph queries by combining binary and worst-case optimal joins. *Proceedings of the VLDB Endowment*, 12(11):1692–1704, July 2019. CODEN ???? ISSN 2150-8097.

Marcus:2019:NLQ

[2165] Ryan Marcus, Parimarjan Negi, Hongzi Mao, Chi Zhang, Mohammad Alizadeh, Tim Kraska, Olga Papaemmanouil, and Nesime Tatbul. Neo: a learned query optimizer. *Proceedings of the VLDB Endowment*, 12(11):1705–1718, July 2019. CODEN ???? ISSN 2150-8097.

Fang:2019:EAD

[2166] Yixiang Fang, Kaiqiang Yu, Reynold Cheng, Laks V. S. Lakshmanan, and

Xuemin Lin. Efficient algorithms for densest subgraph discovery. *Proceedings of the VLDB Endowment*, 12(11): 1719–1732, July 2019. CODEN ???? ISSN 2150-8097.

Marcus:2019:PSD

[2167] Ryan Marcus and Olga Papaemmanouil. Plan-structured deep neural network models for query performance prediction. *Proceedings of the VLDB Endowment*, 12(11):1733–1746, July 2019. CODEN ???? ISSN 2150-8097.

Ren:2019:SSL

[2168] Kun Ren, Dennis Li, and Daniel J. Abadi. SLOG: serializable, low-latency, geo-replicated transactions. *Proceedings of the VLDB Endowment*, 12(11): 1747–1761, July 2019. CODEN ???? ISSN 2150-8097.

Paparrizos:2019:GET

[2169] John Paparrizos and Michael J. Franklin. GRAIL: efficient time-series representation learning. *Proceedings of the VLDB Endowment*, 12(11):1762–1777, July 2019. CODEN ???? ISSN 2150-8097.

Damasio:2019:GGA

[2170] Guilherme Damasio, Spencer Bryson, Vincent Corvinelli, Parke Godfrey, Piotr Mierzejewski, Jaroslaw Szlichta, and Calisto Zuzarte. GALO: guided automated learning for re-optimization. *Proceedings of the VLDB Endowment*, 12(12):1778–1781, August 2019. CODEN ???? ISSN 2150-8097.

Tian:2019:SGS

[2171] Yuanyuan Tian, Wen Sun, Sui Jun Tong, En Liang Xu, Mir Hamid Pirahesh, and Wei Zhao. Synergistic graph and SQL analytics inside IBM Db2. *Proceedings of the VLDB Endowment*, 12(12):1782–1785, August 2019. CODEN ???? ISSN 2150-8097.

Ding:2019:CDC

[2172] Xiaoou Ding, Hongzhi Wang, Jiaxuan Su, Zijue Li, Jianzhong Li, and Hong Gao. Cleanits: a data cleaning system for industrial time series. *Proceedings of the VLDB Endowment*, 12(12):1786–1789, August 2019. CODEN ???? ISSN 2150-8097.

Zhang:2019:IIT

[2173] Yipeng Zhang, Zhifeng Bao, Songsong Mo, Yuchen Li, and Yanghao Zhou. ITAA: an intelligent trajectory-driven outdoor advertising deployment assistant. *Proceedings of the VLDB Endowment*, 12(12):1790–1793, August 2019. CODEN ???? ISSN 2150-8097.

Qian:2019:SHL

[2174] Kun Qian, Lucian Popa, and Prithviraj Sen. SystemER: a human-in-the-loop system for explainable entity resolution. *Proceedings of the VLDB Endowment*, 12(12):1794–1797, August 2019. CODEN ???? ISSN 2150-8097.

Huynh:2019:BEF

[2175] Viet-Phi Huynh and Paolo Papotti. Buckle: evaluating fact checking algorithms built on knowledge bases. *Proceedings of the VLDB Endowment*, 12 (12):1798–1801, August 2019. CODEN ???? ISSN 2150-8097.

Gao:2019:QSE

[2176] Peng Gao, Xusheng Xiao, Zhichun Li, Kangkook Jee, Fengyuan Xu, Sanjeev R. Kulkarni, and Prateek Mittal.

A query system for efficiently investigating complex attack behaviors for enterprise security. *Proceedings of the VLDB Endowment*, 12(12):1802–1805, August 2019. CODEN ???? ISSN 2150-8097.

Miao:2019:CEO

[2177] Zhengjie Miao, Qitian Zeng, Chenjie Li, Boris Glavic, Oliver Kennedy, and Sudeepa Roy. CAPE: explaining outliers by counterbalancing. *Proceedings of the VLDB Endowment*, 12(12):1806–1809, August 2019. CODEN ???? ISSN 2150-8097.

Ramachandra:2019:BAI

[2178] Karthik Ramachandra and Kwanghyun Park. BlackMagic: automatic inlining of scalar UDFs into SQL queries with Froid. *Proceedings of the VLDB Endowment*, 12(12):1810–1813, August 2019. CODEN ???? ISSN 2150-8097.

Berg:2019:PPD

[2179] Lukas Berg, Tobias Ziegler, Carsten Binnig, and Uwe Röhm. ProgressiveDB: progressive data analytics as a middleware. *Proceedings of the VLDB Endowment*, 12(12):1814–1817, August 2019. CODEN ???? ISSN 2150-8097.

Kara:2019:DHT

[2180] Kaan Kara, Zeke Wang, Ce Zhang, and Gustavo Alonso. doppioDB 2.0: hardware techniques for improved integration of machine learning into databases. *Proceedings of the VLDB Endowment*, 12(12):1818–1821, August 2019. CODEN ???? ISSN 2150-8097.

Pahins:2019:CSV

[2181] Cicero A. L. Pahins, Behrooz Omidvar-Tehrani, Sihem Amer-Yahia, Valérie Siroux, Jean-Louis Pepin, Jean-Christian Borel, and João L. D. Comba. COVIZ: a system for visual formation and exploration of patient cohorts. *Proceedings of the VLDB Endowment*, 12(12):1822–1825, August 2019. CODEN ???? ISSN 2150-8097.

Franke:2019:PTF

[2182] Martin Franke, Ziad Sehili, and Erhard Rahm. PRIMAT: a toolbox for fast privacy-preserving matching. *Proceedings of the VLDB Endowment*, 12(12): 1826–1829, August 2019. CODEN ???? ISSN 2150-8097.

Marcus:2019:NFR

[2183] Ryan Marcus, Chi Zhang, Shuai Yu, Geoffrey Kao, and Olga Papaemmanouil. NashDB: fragmentation, replication, and provisioning using economic methods. *Proceedings of the VLDB Endowment*, 12(12):1830–1833, August 2019. CODEN ???? ISSN 2150-8097.

Sabek:2019:FAS

[2184] Ibrahim Sabek, Mashaal Musleh, and Mohamed F. Mokbel. Flash in action: scalable spatial data analysis using Markov logic networks. *Proceedings of the VLDB Endowment*, 12(12):1834–1837, August 2019. CODEN ???? ISSN 2150-8097.

Kuhring:2019:CBO

[2185] Lucas Kuhring and Zsolt István. I can't believe it's not (only) software!: bionic distributed storage for Parquet files. *Proceedings of the VLDB Endowment*, 12(12):1838–1841, August 2019. CODEN ???? ISSN 2150-8097.

Choi:2019:VVI

[2186] Hyewon Choi, Erkang Zhu, Arsala Bangash, and Renée J. Miller. VISE: vehicle image search engine with traffic camera. *Proceedings of the VLDB Endowment*, 12(12):1842–1845, August 2019. CODEN ???? ISSN 2150-8097.

Goldberg:2019:WSF

[2187] Stephan Goldberg, Tova Milo, Slava Novgorodov, and Kathy Razmadze. WiClean: a system for fixing Wikipedia interlinks using revision history patterns. *Proceedings of the VLDB Endowment*, 12(12):1846–1849, August 2019. CODEN ???? ISSN 2150-8097.

Roy:2019:SHC

[2188] Abhishek Roy, Alekh Jindal, Hiren Patel, Ashit Gosalia, Subru Krishnan, and Carlo Curino. SparkCruise: handsfree computation reuse in Spark. *Proceedings of the VLDB Endowment*, 12 (12):1850–1853, August 2019. CODEN ???? ISSN 2150-8097.

Sandha:2019:DDM

[2189] Sandeep Singh Sandha, Wellington Cabrera, Mohammed Al-Kateb, Sanjay Nair, and Mani Srivastava. In-database distributed machine learning: demonstration using Teradata SQL engine. *Proceedings of the VLDB Endowment*, 12(12):1854–1857, August 2019. CODEN ???? ISSN 2150-8097.

Li:2019:SLS

[2190] Zhao Li, Xia Chen, Xuming Pan, Pengcheng Zou, Yuchen Li, and Guoxian Yu. SHOAL: large-scale hierarchical taxonomy via graph-based query coalition in e-commerce. *Proceedings of the VLDB Endowment*, 12(12):1858–1861, August 2019. CODEN ???? ISSN 2150-8097.

Xu:2019:DMD

[2191] Min Xu, Tianhao Wang, Bolin Ding, Jingren Zhou, Cheng Hong, and Zhicong Huang. DPSAaS: multidimensional data sharing and analytics as services under local differential privacy. *Proceedings of the VLDB Endowment*, 12(12):1862–1865, August 2019. CODEN ???? ISSN 2150-8097.

Cao:2019:PPS

[2192] Yang Cao, Yonghui Xiao, Li Xiong, Liquan Bai, and Masatoshi Yoshikawa. PriSTE: protecting spatiotemporal event privacy in continuous location-based services. *Proceedings of the VLDB Endowment*, 12(12):1866–1869, August 2019. CODEN ???? ISSN 2150-8097.

Deutch:2019:DOS

[2193] Daniel Deutch, Evgeny Marants, and Yuval Moskovitch. Datalignment: ontology schema alignment through datalog containment. *Proceedings of the VLDB Endowment*, 12(12):1870–1873, August 2019. CODEN ???? ISSN 2150-8097.

Ge:2019:IIH

[2194] Congcong Ge, Yunjun Gao, Xiaoye Miao, Lu Chen, Christian S. Jensen, and Ziyuan Zhu. IHCS: an integrated hybrid cleaning system. *Proceedings of the VLDB Endowment*, 12(12):1874–1877, August 2019. CODEN ???? ISSN 2150-8097.

Costa:2019:CGB

[2195] Constantinos Costa, Xiaoyu Ge, and Panos K. Chrysanthis. CAPRIO:

graph-based integration of indoor and outdoor data for path discovery. *Proceedings of the VLDB Endowment*, 12 (12):1878–1881, August 2019. CODEN ???? ISSN 2150-8097.

Wu:2019:HAS

[2196] Yingjun Wu, Jia Yu, Yuanyuan Tian, Richard Sidle, and Ronald Barber. HERMIT in action: succinct secondary indexing mechanism via correlation exploration. *Proceedings of the VLDB Endowment*, 12(12):1882–1885, August 2019. CODEN ???? ISSN 2150-8097.

Loudet:2019:DSH

[2197] Julien Loudet, Iulian Sandu-Popa, and Luc Bouganim. DISPERS: securing highly distributed queries on personal data management systems. *Proceedings of the VLDB Endowment*, 12(12):1886–1889, August 2019. CODEN ???? ISSN 2150-8097.

Akhter:2019:SFS

[2198] Adil Akhter, Marios Fragkoulis, and Asterios Katsifodimos. Stateful functions as a service in action. *Proceedings of the VLDB Endowment*, 12(12): 1890–1893, August 2019. CODEN ???? ISSN 2150-8097.

Ordookhanians:2019:DKO

[2199] Allen Ordookhanians, Xin Li, Supun Nakandala, and Arun Kumar. Demonstration of Krypton: optimized CNN inference for occlusion-based deep CNN explanations. *Proceedings of the VLDB Endowment*, 12(12):1894–1897, August 2019. CODEN ???? ISSN 2150-8097.

Miao:2019:LVE

[2200] Zhengjie Miao, Andrew Lee, and Sudeepa Roy. LensXPlain: visualizing and explaining contributing subsets for aggregate query answers. *Proceedings of the VLDB Endowment*, 12(12):1898–1901, August 2019. CODEN ???? ISSN 2150-8097.

Zhang:2019:JDL

[2201] Yi Zhang and Zachary G. Ives. Juneau: data lake management for Jupyter. *Proceedings of the VLDB Endowment*, 12(12):1902–1905, August 2019. CODEN ???? ISSN 2150-8097.

Hasani:2019:AEA

[2202] Sona Hasani, Faezeh Ghaderi, Shohedul Hasan, Saravanan Thirumuruganathan, Abolfazl Asudeh, Nick Koudas, and Gautam Das. ApproxML: efficient approximate ad-hoc ML models through materialization and reuse. *Proceedings of the VLDB Endowment*, 12(12):1906–1909, August 2019. CODEN ???? ISSN 2150-8097.

Essertel:2019:FAL

[2203] Grégory Essertel, Ruby Y. Tahboub, Fei Wang, James Decker, and Tiark Rompf. Flare & Lantern: efficiently swapping horses midstream. *Proceedings of the VLDB Endowment*, 12(12): 1910–1913, August 2019. CODEN ???? ISSN 2150-8097.

Martins:2019:TES

[2204] Ruben Martins, Jia Chen, Yanju Chen, Yu Feng, and Isil Dillig. Trinity: an extensible synthesis framework for data science. *Proceedings of the VLDB Endowment*, 12(12):1914–1917, August 2019. CODEN ???? ISSN 2150-8097.

Huang:2019:PAA

[2205] Zhiqi Huang, Ryan McKenna, George Bissias, Gerome Miklau, Michael

Hay, and Ashwin Machanavajjhala. PSynDB: accurate and accessible private data generation. *Proceedings of the VLDB Endowment*, 12(12):1918–1921, August 2019. CODEN ???? ISSN 2150-8097.

Chandramouli:2019:FFI

[2206] Badrish Chandramouli, Dong Xie, Yinan Li, and Donald Kossmann. FishStore: fast ingestion and indexing of raw data. *Proceedings of the VLDB Endowment*, 12(12):1922–1925, August 2019. CODEN ???? ISSN 2150-8097.

Diao:2019:SMF

[2207] Yanlei Diao, Paweł Guzewicz, Ioana Manolescu, and Mirjana Mazuran. Spade: a modular framework for analytical exploration of RDF graphs. *Proceedings of the VLDB Endowment*, 12 (12):1926–1929, August 2019. CODEN ???? ISSN 2150-8097.

Dsilva:2019:MRD

[2208] Joseph Vinish D'silva, Florestan De Moor, and Bettina Kemme. Making an RDBMS data scientist friendly: advanced in-database interactive analytics with visualization support. *Proceedings of the VLDB Endowment*, 12(12): 1930–1933, August 2019. CODEN ???? ISSN 2150-8097.

Zaouk:2019:UNG

[2209] Khaled Zaouk, Fei Song, Chenghao Lyu, Arnab Sinha, Yanlei Diao, and Prashant Shenoy. UDAO: a next-generation unified data analytics optimizer. *Proceedings of the VLDB Endowment*, 12(12):1934–1937, August 2019. CODEN ???? ISSN 2150-8097.

Jo:2019:AFC

[2210] Saehan Jo, Immanuel Trummer, Weicheng Yu, Xuezhi Wang, Cong Yu, Daniel Liu, and Niyati Mehta. AggChecker: a fact-checking system for text summaries of relational data sets. *Proceedings of the VLDB Endowment*, 12(12):1938–1941, August 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:GIG

[2211] Hanzhang Wang, Phuong Nguyen, Jun Li, Selcuk Kopru, Gene Zhang, Sanjeev Katariya, and Sami Ben-Romdhane. GRANO: interactive graph-based root cause analysis for cloud-native distributed data platform. *Proceedings of the VLDB Endowment*, 12(12):1942–1945, August 2019. CODEN ???? ISSN 2150-8097.

Frey:2019:DHB

[2212] Davide Frey, Marc X. Makkes, Pierre-Louis Roman, François Taïani, and Spyros Voulgaris. Dietcoin: hardening Bitcoin transaction verification process for mobile devices. *Proceedings of the VLDB Endowment*, 12(12):1946–1949, August 2019. CODEN ???? ISSN 2150-8097.

Singla:2019:RLS

[2213] Samriddhi Singla, Ahmed Eldawy, Rami Alghamdi, and Mohamed F. Mokbel. Raptor: large scale analysis of big raster and vector data. *Proceedings of the VLDB Endowment*, 12(12): 1950–1953, August 2019. CODEN ???? ISSN 2150-8097.

Rezig:2019:DCH

[2214] El Kindi Rezig, Lei Cao, Michael Stonebraker, Giovanni Simonini, Wenbo

Tao, Samuel Madden, Mourad Ouzzani, Nan Tang, and Ahmed K. Elmagarmid. Data Civilizer 2.0: a holistic framework for data preparation and analytics. *Proceedings of the VLDB Endowment*, 12(12):1954–1957, August 2019. CODEN ???? ISSN 2150-8097.

Spiegelberg:2019:TRE

[2215] Leonhard F. Spiegelberg and Tim Kraska. Tuplex: robust, efficient analytics when Python rules. *Proceedings of the VLDB Endowment*, 12(12):1958–1961, August 2019. CODEN ???? ISSN 2150-8097.

Renggli:2019:EMC

[2216] Cedric Renggli, Frances Ann Hubis, Bojan Karlas, Kevin Schawinski, Wentao Wu, and Ce Zhang. Ease.ml/ci and Ease.ml/meter in action: towards data management for statistical generalization. *Proceedings of the VLDB Endowment*, 12(12):1962–1965, August 2019. CODEN ???? ISSN 2150-8097.

Han:2019:PRV

[2217] Xueran Han, Jun Chen, Jiaheng Lu, Yueguo Chen, and Xiaoyong Du. PivotE: revealing and visualizing the underlying entity structures for exploration. *Proceedings of the VLDB Endowment*, 12(12):1966–1969, August 2019. CODEN ???? ISSN 2150-8097.

Lu:2019:SYA

[2218] Jiaheng Lu, Yuxing Chen, Herodotos Herodotou, and Shivnath Babu. Speedup your analytics: automatic parameter tuning for databases and big data systems. *Proceedings of the VLDB Endowment*, 12(12):1970–1973, August 2019. CODEN ???? ISSN 2150-8097.

Meng:2019:TAC

[2219] Yu Meng, Jiaxin Huang, Jingbo Shang, and Jiawei Han. TextCube: automated construction and multidimensional exploration. *Proceedings of the VLDB Endowment*, 12(12):1974–1977, August 2019. CODEN ???? ISSN 2150-8097.

Amer-Yahia:2019:EEO

[2220] Sihem Amer-Yahia and Senjuti Basu Roy. The ever evolving online labor market: overview, challenges and opportunities. *Proceedings of the VLDB Endowment*, 12(12):1978–1981, August 2019. CODEN ???? ISSN 2150-8097.

Sabek:2019:MLM

[2221] Ibrahim Sabek and Mohamed F. Mokbel. Machine learning meets big spatial data. *Proceedings of the VLDB Endowment*, 12(12):1982–1985, August 2019. CODEN ???? ISSN 2150-8097.

Nargesian:2019:DLM

[2222] Fatemeh Nargesian, Erkang Zhu, Renée J. Miller, Ken Q. Pu, and Patricia C. Arocena. Data lake management: challenges and opportunities. *Proceedings of the VLDB Endowment*, 12(12):1986–1989, August 2019. CODEN ???? ISSN 2150-8097.

Lakshmanan:2019:CFN

[2223] Laks V. S. Lakshmanan, Michael Simpson, and Saravanan Thirumuruganathan. Combating fake news: a data management and mining perspective. *Proceedings of the VLDB Endowment*, 12(12):1990–1993, August 2019. CODEN ???? ISSN 2150-8097.

Anciaux:2019:PDS

[2224] Nicolas Anciaux, Luc Bouganim, Philippe Pucheral, Iulian Sandu Popa, and Guillaume Scerri. Personal database security and trusted execution environments: a tutorial at the crossroads. *Proceedings of the VLDB Endowment*, 12(12):1994–1997, August 2019. CODEN ???? ISSN 2150-8097.

Kessler:2019:SHG

[2225] Stephan Kessler, Jens Hoff, and Johann-Christoph Freytag. SAP HANA goes private: from privacy research to privacy aware enterprise analytics. *Proceedings of the VLDB Endowment*, 12(12):1998–2009, August 2019. CODEN ???? ISSN 2150-8097.

Damasio:2019:GAL

[2226] Guilherme Damasio, Vincent Corvinelli, Parke Godfrey, Piotr Mierzejewski, Alex Mihaylov, Jaroslaw Szlichta, and Calisto Zuzarte. Guided automated learning for query workload re-optimization. *Proceedings of the VLDB Endowment*, 12(12):2010–2021, August 2019. CODEN ???? ISSN 2150-8097.

Chattopadhyay:2019:PUS

[2227] Biswapesh Chattopadhyay, Priyam Dutta, Weiran Liu, Ott Tinn, Andrew Mccormick, Aniket Mokashi, Paul Harvey, Hector Gonzalez, David Lomax, Sagar Mittal, Roee Ebenstein, Nikita Mikhaylin, Hung ching Lee, Xiaoyan Zhao, Tony Xu, Luis Perez, Farhad Shahmohammadi, Tran Bui, Neil McKay, Selcuk Aya, Vera Lychagina, and Brett Elliott. Procella: unifying serving and analytical data at YouTube. *Proceedings of the VLDB Endowment*, 12(12):2022–2034, August 2019. CODEN ???? ISSN 2150-8097.

Lu:2019:LET

[2228] Wei Lu, Zhanhao Zhao, Xiaoyu Wang, Haixiang Li, Zhenmiao Zhang, Zhiyu Shui, Sheng Ye, Anqun Pan, and Xiaoyong Du. A lightweight and efficient temporal database management system in TDSQL. *Proceedings of the VLDB Endowment*, 12(12):2035–2046, August 2019. CODEN ???? ISSN 2150-8097.

Sherkat:2019:NSE

[2229] Reza Sherkat, Colin Florendo, Mihnea Andrei, Rolando Blanco, Adrian Dragusanu, Amit Pathak, Pushkar Khadilkar, Neeraj Kulkarni, Christian Lemke, Sebastian Seifert, Sarika Iyer, Sasikanth Gottapu, Robert Schulze, Chaitanya Gottipati, Nirvik Basak, Yanhong Wang, Vivek Kandiyanallur, Santosh Pendap, Dheren Gala, Rajesh Almeida, and Prasanta Ghosh. Native store extension for SAP HANA. *Proceedings of the VLDB Endowment*, 12 (12):2047–2058, August 2019. CODEN ???? ISSN 2150-8097.

Zhan:2019:ART

[2230] Chaoqun Zhan, Maomeng Su, Chuangxian Wei, Xiaoqiang Peng, Liang Lin, Sheng Wang, Zhe Chen, Feifei Li, Yue Pan, Fang Zheng, and Chengliang Chai. AnalyticDB: real-time OLAP database system at Alibaba cloud. *Proceedings of the VLDB Endowment*, 12 (12):2059–2070, August 2019. CODEN ???? ISSN 2150-8097.

Schultz:2019:TCM

[2231] William Schultz, Tess Avitabile, and Alyson Cabral. Tunable consistency in MongoDB. *Proceedings of the VLDB Endowment*, 12(12):2071–2081, August 2019. CODEN ???? ISSN 2150-8097.

Cao:2019:TOR

[2232] Shaosheng Cao, XinXing Yang, Cen Chen, Jun Zhou, Xiaolong Li, and Yuan Qi. TitAnt: online real-time transaction fraud detection in Ant Financial. *Proceedings of the VLDB Endowment*, 12(12):2082–2093, August 2019. CODEN ???? ISSN 2150-8097.

Zhu:2019:ACG

[2233] Rong Zhu, Kun Zhao, Hongxia Yang, Wei Lin, Chang Zhou, Baole Ai, Yong Li, and Jingren Zhou. AliGraph: a comprehensive graph neural network platform. *Proceedings of the VLDB Endowment*, 12(12):2094–2105, August 2019. CODEN ???? ISSN 2150-8097.

Chen:2019:CSF

[2234] Zhimin Chen, Yue Wang, Vivek Narasayya, and Surajit Chaudhuri. Customizable and scalable fuzzy join for big data. *Proceedings of the VLDB Endowment*, 12(12):2106–2117, August 2019. CODEN ???? ISSN 2150-8097.

Li:2019:QQA

[2235] Guoliang Li, Xuanhe Zhou, Shifu Li, and Bo Gao. QTune: a query-aware database tuning system with deep reinforcement learning. *Proceedings of the VLDB Endowment*, 12(12):2118–2130, August 2019. CODEN ???? ISSN 2150-8097.

Kandula:2019:EAQ

[2236] Srikanth Kandula, Kukjin Lee, Surajit Chaudhuri, and Marc Friedman. Experiences with approximating queries in Microsoft's production big-data clusters. *Proceedings of the VLDB Endowment*, 12(12):2131–2142, August 2019. CODEN ???? ISSN 2150-8097.

Antonopoulos:2019:CTR

[2237] Panagiotis Antonopoulos, Peter Byrne, Wayne Chen, Cristian Diaconu, Raghavendra Thallam Kodandaramaih, Hanuma Kodavalla, Prashanth Purnananda, Adrian-Leonard Radu, Chaitanya Sreenivas Ravella, and Girish Mittur Venkataramanappa. Constant time recovery in Azure SQL database. *Proceedings of the VLDB Endowment*, 12(12):2143–2154, August 2019. CODEN ???? ISSN 2150-8097.

Huang:2019:YGD

[2238] Yuzhen Huang, Yingjie Shi, Zheng Zhong, Yihui Feng, James Cheng, Jiwei Li, Haochuan Fan, Chao Li, Tao Guan, and Jingren Zhou. Yugong: geo-distributed data and job placement at scale. *Proceedings of the VLDB Endowment*, 12(12):2155–2169, August 2019. CODEN ???? ISSN 2150-8097.

Tan:2019:CCD

[2239] Junjay Tan, Thanaa Ghanem, Matthew Perron, Xiangyao Yu, Michael Stonebraker, David DeWitt, Marco Serafini, Ashraf Aboulnaga, and Tim Kraska. Choosing a cloud DBMS: architectures and tradeoffs. *Proceedings of the VLDB Endowment*, 12(12):2170–2182, August 2019. CODEN ???? ISSN 2150-8097.

Zhang:2019:SSM

[2240] Jingtian Zhang, Sai Wu, Zeyuan Tan, Gang Chen, Zhushi Cheng, Wei Cao, Yusong Gao, and Xiaojie Feng. S3: a scalable in-memory skip-list index for key–value store. *Proceedings of the VLDB Endowment*, 12(12):2183–2194, August 2019. CODEN ???? ISSN 2150-8097.

Masson:2019:DFF

[2241] Charles Masson, Jee E. Rim, and Homin K. Lee. DDSketch: a fast and fully-mergeable quantile sketch with relative-error guarantees. *Proceedings of the VLDB Endowment*, 12(12):2195–2205, August 2019. CODEN ???? ISSN 2150-8097.

Long:2019:DSL

[2242] Qiang Long, Wei Wang, Jinfu Deng, Song Liu, Wenhao Huang, Fangying Chen, and Sifan Liu. A distributed system for large-scale n-gram language models at Tencent. *Proceedings of the VLDB Endowment*, 12(12):2206–2217, August 2019. CODEN ???? ISSN 2150-8097.

Dursun:2019:MDQ

[2243] Kayhan Dursun, Carsten Binnig, Ugur Cetintemel, Garret Swart, and Weiwei Gong. A morsel-driven query execution engine for heterogeneous multi-cores. *Proceedings of the VLDB Endowment*, 12(12):2218–2229, August 2019. CODEN ???? ISSN 2150-8097.

Cao:2019:SSS

[2244] Lei Cao, Wenbo Tao, Sungtae An, Jing Jin, Yizhou Yan, Xiaoyu Liu, Wendong Ge, Adam Sah, Leilani Battle, Jimeng Sun, Remco Chang, Brandon Westover, Samuel Madden, and Michael Stonebraker. Smile: a system to support machine learning on EEG data at scale. *Proceedings of the VLDB Endowment*, 12(12):2230–2241, August 2019. CODEN ???? ISSN 2150-8097.

Green:2019:UGD

[2245] Alastair Green, Paolo Guagliardo, Leonid Libkin, Tobias Lindaaker, Victor Marsault, Stefan Plantikow, Martin Schuster, Petra Selmer, and Hannes Voigt. Updating graph databases with Cypher. *Proceedings of the VLDB Endowment*, 12(12):2242–2254, August 2019. CODEN ???? ISSN 2150-8097.

Kamsky:2019:ATC

[2246] Asya Kamsky. Adapting TPC-C benchmark to measure performance of multi-document transactions in MongoDB. *Proceedings of the VLDB Endowment*, 12(12):2254–2262, August 2019. CODEN ???? ISSN 2150-8097.

Li:2019:CND

[2247] Feifei Li. Cloud-native database systems at Alibaba: opportunities and challenges. *Proceedings of the VLDB Endowment*, 12(12):2263–2272, August 2019. CODEN ???? ISSN 2150-8097.

Boehm:2019:MME

[2248] Alexander Boehm. In-memory for the masses: enabling cost-efficient deployments of in-memory data management platforms for business applications. *Proceedings of the VLDB Endowment*, 12(12):2273–2275, August 2019. CODEN ???? ISSN 2150-8097.

Hubail:2019:CAN

[2249] Murtadha Al Hubail, Ali Alsuliman, Michael Blow, Michael Carey, Dmitry Lychagin, Ian Maxon, and Till Westmann. Couchbase analytics: NoETL for scalable NoSQL data analysis. *Proceedings of the VLDB Endowment*, 12 (12):2275–2286, August 2019. CODEN ???? ISSN 2150-8097.

Colyer:2019:PS

[2250] Adrian Colyer. Performance in the spotlight. *Proceedings of the VLDB*

Endowment, 12(12):2287–2289, August 2019. CODEN ???? ISSN 2150-8097.

Abouzied:2019:ILS

[2251] Azza Abouzied, Daniel J. Abadi, Kamil Bajda-Pawlikowski, and Avi Silberschatz. Integration of large-scale data processing systems and traditional parallel database technology. *Proceedings of the VLDB Endowment*, 12(12):2290–2299, August 2019. CODEN ???? ISSN 2150-8097.

Cooper:2019:PSL

[2252] Brian F. Cooper, P. P. S. Narayan, Raghu Ramakrishnan, Utkarsh Srivastava, Adam Silberstein, Philip Bohannon, Hans-Arno Jacobsen, Nick Puz, Daniel Weaver, and Ramana Yerneni. PNUTS to Sherpa: lessons from Yahoo!'s cloud database. *Proceedings of the VLDB Endowment*, 12(12):2300–2307, August 2019. CODEN ???? ISSN 2150-8097.

Tan:2019:WPD

[2253] Wang-Chiew Tan. What I probably did right and what I think I could have done better. *Proceedings of the VLDB Endowment*, 12(12):2308, August 2019. CODEN ???? ISSN 2150-8097.

Parameswaran:2019:EDS

[2254] Aditya Parameswaran. Enabling data science for the majority. *Proceedings of the VLDB Endowment*, 12(12):2309–2322, August 2019. CODEN ???? ISSN 2150-8097.

Rekatsinas:2019:ODM

[2255] Theodoras Rekatsinas, Sudeepa Roy, Manasi Vartak, Ce Zhang, and Neoklis Polyzotis. Opportunities for data management research in the era of horizontal AI/ML. *Proceedings of the VLDB Endowment*, 12(12):2323, August 2019. CODEN ???? ISSN 2150-8097.

Barthels:2019:SCH

[2256] Claude Barthels, Ingo Müller, Konstantin Taranov, Gustavo Alonso, and Torsten Hoefler. Strong consistency is not hard to get: two-phase locking and two-phase commit on thousands of cores. *Proceedings of the VLDB Endowment*, 12(13):2325–2338, September 2019. CODEN ???? ISSN 2150-8097.

Wei:2019:DRE

[2257] Ziheng Wei, Uwe Leck, and Sebastian Link. Discovery and ranking of embedded uniqueness constraints. *Proceedings of the VLDB Endowment*, 12(13):2339–2352, September 2019. CODEN ???? ISSN 2150-8097.

Chu:2019:ODB

[2258] Lingyang Chu, Yanyan Zhang, Yu Yang, Lanjun Wang, and Jian Pei. Online density bursting subgraph detection from temporal graphs. *Proceedings of the VLDB Endowment*, 12(13):2353–2365, September 2019. CODEN ???? ISSN 2150-8097.

Holanda:2019:PII

[2259] Pedro Holanda, Mark Raasveldt, Stefan Manegold, and Hannes Mühleisen. Progressive indexes: indexing for interactive data analysis. *Proceedings of the VLDB Endowment*, 12(13):2366–2378, September 2019. CODEN ???? ISSN 2150-8097.

Hanai:2019:DEP

[2260] Masatoshi Hanai, Toyotaro Suzumura, Wen Jun Tan, Elvis Liu, Georgios Theodoropoulos, and Wentong

Cai. Distributed edge partitioning for trillion-edge graphs. *Proceedings of the VLDB Endowment*, 12(13):2379–2392, September 2019. CODEN ???? ISSN 2150-8097.

Athanassoulis:2019:OCL

[2261] Manos Athanassoulis, Kenneth S. Bøgh, and Stratos Idreos. Optimal column layout for hybrid workloads. *Proceedings of the VLDB Endowment*, 12 (13):2393–2407, September 2019. CODEN ???? ISSN 2150-8097.

Sintos:2019:SDC

[2262] Stavros Sintos, Pankaj K. Agarwal, and Jun Yang. Selecting data to clean for fact checking: minimizing uncertainty vs. maximizing surprise. *Proceedings of the VLDB Endowment*, 12(13):2408–2421, September 2019. CODEN ???? ISSN 2150-8097.

Chawla:2019:RMQ

[2263] Shuchi Chawla, Shaleen Deep, Paraschos Koutrisw, and Yifeng Teng. Revenue maximization for query pricing. *Proceedings of the VLDB Endowment*, 13 (1):1–14, September 2019. CODEN ???? ISSN 2150-8097.

Shi:2019:RTP

[2264] Jieming Shi, Renchi Yang, Tianyuan Jin, Xiaokui Xiao, and Yin Yang. Real-time top-k Personalized PageRank over large graphs on GPUs. *Proceedings of the VLDB Endowment*, 13(1):15–28, September 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:FLS

[2265] Sheng Wang, Zhifeng Bao, J. Shane Culpepper, Timos Sellis, and Xiaolin Qin. Fast large-scale trajectory clustering. *Proceedings of the VLDB Endowment*, 13(1):29–42, September 2019. CODEN ???? ISSN 2150-8097.

Herodotou:2019:ADT

[2266] Herodotos Herodotou and Elena Kakoulli. Automating distributed tiered storage management in cluster computing. *Proceedings of the VLDB Endowment*, 13(1):43–56, September 2019. CODEN ???? ISSN 2150-8097.

Jung:2019:AAD

[2267] Jinho Jung, Hong Hu, Joy Arulraj, Taesoo Kim, and Woonhak Kang. APOLLO: automatic detection and diagnosis of performance regressions in database systems. *Proceedings of the VLDB Endowment*, 13(1):57–70, September 2019. CODEN ???? ISSN 2150-8097.

Owaida:2019:LLD

[2268] Muhsen Owaida, Gustavo Alonso, Laura Fogliarini, Anthony Hock-Koon, and Pierre-Etienne Melet. Lowering the latency of data processing pipelines through FPGA based hardware acceleration. *Proceedings of the VLDB Endowment*, 13(1):71–85, September 2019. CODEN ???? ISSN 2150-8097.

Cai:2019:MSS

[2269] Shaofeng Cai, Gang Chen, Beng Chin Ooi, and Jinyang Gao. Model slicing for supporting complex analytics with elastic inference cost and resource constraints. *Proceedings of the VLDB Endowment*, 13(2):86–99, October 2019. CODEN ???? ISSN 2150-8097.

Herlihy:2019:CCD

[2270] Maurice Herlihy, Barbara Liskov, and Liuba Shrira. Cross-chain deals and adversarial commerce. *Proceedings of the VLDB Endowment*, 13(2):100–113, October 2019. CODEN ???? ISSN 2150-8097.

Zois:2019:EMM

[2271] Vasileios Zois, Vassilis J. Tsotras, and Walid A. Najjar. Efficient main-memory top-k selection for multicore architectures. *Proceedings of the VLDB Endowment*, 13(2):114–127, October 2019. CODEN ???? ISSN 2150-8097.

Bottcher:2019:SGC

[2272] Jan Böttcher, Viktor Leis, Thomas Neumann, and Alfons Kemper. Scalable garbage collection for in-memory MVCC systems. *Proceedings of the VLDB Endowment*, 13(2):128–141, October 2019. CODEN ???? ISSN 2150-8097.

Yang:2019:FDD

[2273] Bohua Yang, Dong Wen, Lu Qin, Ying Zhang, Xubo Wang, and Xuemin Lin. Fully dynamic depth-first search in directed graphs. *Proceedings of the VLDB Endowment*, 13(2):142–154, October 2019. CODEN ???? ISSN 2150-8097.

Ma:2019:LMC

[2274] Chenhao Ma, Reynold Cheng, Laks V. S. Lakshmanan, Tobias Grubenmann, Yixiang Fang, and Xiaodong Li. LINC: a motif counting algorithm for uncertain graphs. *Proceedings of the VLDB Endowment*, 13(2):155–168, October 2019. CODEN ???? ISSN 2150-8097.

Eskandarian:2019:OOQ

[2275] Saba Eskandarian and Matei Zaharia. ObliDB: oblivious query processing for secure databases. *Proceedings of the VLDB Endowment*, 13(2):169–183, October 2019. CODEN ???? ISSN 2150-8097.

Ge:2019:SMP

[2276] Chang Ge, Ihab F. Ilyas, and Florian Kerschbaum. Secure multi-party functional dependency discovery. *Proceedings of the VLDB Endowment*, 13(2): 184–196, October 2019. CODEN ???? ISSN 2150-8097.

Wang:2019:VFM

[2277] Minmei Wang, Mingxun Zhou, Shouqian Shi, and Chen Qian. Vacuum filters: more space-efficient and faster replacement for Bloom and cuckoo filters. *Proceedings of the VLDB Endowment*, 13 (2):197–210, October 2019. CODEN ???? ISSN 2150-8097.

Sun:2019:SES

[2278] Yihan Sun, Guy E. Blelloch, Wan Shen Lim, and Andrew Pavlo. On supporting efficient snapshot isolation for hybrid workloads with multi-versioned indexes. *Proceedings of the VLDB Endowment*, 13(2):211–225, October 2019. CODEN ???? ISSN 2150-8097.

Fang:2019:IMV

[2279] Zhuhe Fang, Beilei Zheng, and Chuliang Weng. Interleaved multi-vectorizing. *Proceedings of the VLDB Endowment*, 13(3):226–238, November 2019. CODEN ???? ISSN 2150-8097.

Shetiya:2019:UOA

[2280] Suraj Shetiya, Abolfazl Asudeh, Sadia Ahmed, and Gautam Das. A unified optimization algorithm for solving “regret-minimizing representative” problems. *Proceedings of the VLDB*

Endowment, 13(3):239–251, November 2019. CODEN ???? ISSN 2150-8097.

Kandula:2019:PDI

[2281] Srikanth Kandula, Laurel Orr, and Surajit Chaudhuri. Pushing data-induced predicates through joins in big-data clusters. *Proceedings of the VLDB Endowment*, 13(3):252–265, November 2019. CODEN ???? ISSN 2150-8097.

Pena:2019:DAE

[2282] Eduardo H. M. Pena, Eduardo C. de Almeida, and Felix Naumann. Discovery of approximate (and exact) denial constraints. *Proceedings of the VLDB Endowment*, 13(3):266–278, November 2019. CODEN ???? ISSN 2150-8097.

Yang:2019:DUC

[2283] Zongheng Yang, Eric Liang, Amog Kamsetty, Chenggang Wu, Yan Duan, Xi Chen, Pieter Abbeel, Joseph M. Hellerstein, Sanjay Krishnan, and Ion Stoica. Deep unsupervised cardinality estimation. *Proceedings of the VLDB Endowment*, 13(3):279–292, November 2019. CODEN ???? ISSN 2150-8097.

Ding:2019:FGI

[2284] Zeyu Ding, Yuxin Wang, Danfeng Zhang, and Daniel Kifer. Free gap information from the differentially private sparse vector and noisy max mechanisms. *Proceedings of the VLDB Endowment*, 13(3):293–306, November 2019. CODEN ???? ISSN 2150-8097.

Sun:2019:EEL

[2285] Ji Sun and Guoliang Li. An end-to-end learning-based cost estimator. *Proceedings of the VLDB Endowment*, 13 (3):307–319, November 2019. CODEN ???? ISSN 2150-8097.

Zeng:2019:LMD

[2286] Yuxiang Zeng, Yongxin Tong, and Lei Chen. Last-mile delivery made practical: an efficient route planning framework with theoretical guarantees. *Proceedings of the VLDB Endowment*, 13 (3):320–333, November 2019. CODEN ???? ISSN 2150-8097.

Kepe:2019:DPM

[2287] Tiago R. Kepe, Eduardo C. de Almeida, and Marco A. Z. Alves. Database processing-in-memory: an experimental study. *Proceedings of the VLDB Endowment*, 13(3):334–347, November 2019. CODEN ???? ISSN 2150-8097.

Leeka:2019:ISO

[2288] Jyoti Leeka and Kaushik Rajan. Incorporating super-operators in big-data query optimizers. *Proceedings of the VLDB Endowment*, 13(3):348–361, November 2019. CODEN ???? ISSN 2150-8097.

Li:2019:EPM

[2289] Conggai Li, Fan Zhang, Ying Zhang, Lu Qin, Wenjie Zhang, and Xuemin Lin. Efficient progressive minimum k-core search. *Proceedings of the VLDB Endowment*, 13(3):362–375, November 2019. CODEN ???? ISSN 2150-8097.

Zhu:2019:HNL

[2290] Hang Zhu, Zhihao Bai, Jialin Li, Ellis Michael, Dan R. K. Ports, Ion Stoica, and Xin Jin. Harmonia: near-linear scalability for replicated storage with in-network conflict detection. *Proceedings of the VLDB Endowment*, 13 (3):376–389, November 2019. CODEN ???? ISSN 2150-8097.

Walenz:2019:LSC

[2291] Brett Walenz, Stavros Sintos, Sudeepa Roy, and Jun Yang. Learning to sample: counting with complex queries. *Proceedings of the VLDB Endowment*, 13(3):390–402, November 2019. CODEN ???? ISSN 2150-8097.

Echihabi:2019:RLH

[2292] Karima Echihabi, Kostas Zoumpatianos, Themis Palpanas, and Houda Benbrahim. Return of the Lernaean Hydra: experimental evaluation of data series approximate similarity search. *Proceedings of the VLDB Endowment*, 13(3):403–420, November 2019. CODEN ???? ISSN 2150-8097.

Zhou:2019:DDI

[2293] Xinjing Zhou, Lidan Shou, Ke Chen, Wei Hu, and Gang Chen. DPTree: differential indexing for persistent memory. *Proceedings of the VLDB Endowment*, 13(4):421–434, December 2019. CODEN ???? ISSN 2150-8097.

Karimov:2019:AAH

[2294] Jeyhun Karimov, Tilmann Rabl, and Volker Markl. AJoin: ad-hoc stream joins at scale. *Proceedings of the VLDB Endowment*, 13(4):435–448, December 2019. CODEN ???? ISSN 2150-8097.

Luo:2019:PSL

[2295] Chen Luo and Michael J. Carey. On performance stability in LSM-based storage systems. *Proceedings of the VLDB Endowment*, 13(4):449–462, December 2019. CODEN ???? ISSN 2150-8097.

Peng:2019:TBT

[2296] You Peng, Ying Zhang, Xuemin Lin, Wenjie Zhang, Lu Qin, and Jingren Zhou. Towards bridging theory and practice: hop-constrained s–t simple path enumeration. *Proceedings of the VLDB Endowment*, 13(4):463–476, December 2019. CODEN ???? ISSN 2150-8097.

Zhang:2019:PDS

[2297] Yuhao Zhang and Arun Kumar. Panorama: a data system for unbounded vocabulary querying over video. *Proceedings of the VLDB Endowment*, 13(4):477–491, December 2019. CODEN ???? ISSN 2150-8097.

Lakhotia:2019:PTS

[2298] Kartik Lakhotia, Rajgopal Kannan, Qing Dong, and Viktor Prasanna. Planting trees for scalable and efficient canonical hub labeling. *Proceedings of the VLDB Endowment*, 13(4):492–505, December 2019. CODEN ???? ISSN 2150-8097.

Lahoti:2019:OIF

[2299] Preethi Lahoti, Krishna P. Gummadi, and Gerhard Weikum. Operationalizing individual fairness with pairwise fair representations. *Proceedings of the VLDB Endowment*, 13(4):506–518, December 2019. CODEN ???? ISSN 2150-8097.

Kakaraparthy:2019:ODL

[2300] Aarati Kakaraparthy, Jignesh M. Patel, Kwanghyun Park, and Brian P. Kroth. Optimizing databases by learning hidden parameters of solid state drives. *Proceedings of the VLDB Endowment*, 13(4):519–532, December 2019. CODEN ???? ISSN 2150-8097.

Kang:2019:BOD

[2301] Daniel Kang, Peter Bailis, and Matei Zaharia. BlazeIt: optimizing declarative aggregation and limit queries for neural network-based video analytics. *Proceedings of the VLDB Endowment*, 13(4):533–546, December 2019. CODEN ???? ISSN 2150-8097.

Huang:2019:JST

[2302] Dawei Huang, Dong Young Yoon, Seth Pettie, and Barzan Mozafari. Joins on samples: a theoretical guide for practitioners. *Proceedings of the VLDB Endowment*, 13(4):547–560, December 2019. CODEN ???? ISSN 2150-8097.

Karagiannis:2019:MAK

[2303] Georgios Karagiannis, Immanuel Trummer, Saehan Jo, Shubham Khandelwal, Xuezhi Wang, and Cong Yu. Mining an "anti-knowledge base" from Wikipedia updates with applications to fact checking and beyond. *Proceedings of the VLDB Endowment*, 13(4):561–573, December 2019. CODEN ???? ISSN 2150-8097.

Lersch:2019:EPM

[2304] Lucas Lersch, Xiangpeng Hao, Ismail Oukid, Tianzheng Wang, and Thomas Willhalm. Evaluating persistent memory range indexes. *Proceedings of the VLDB Endowment*, 13(4):574–587, December 2019. CODEN ???? ISSN 2150-8097.

Goldstein:2020:MBR

[2305] Jonathan Goldstein, Ahmed Abdelhamid, Mike Barnett, Sebastian Burckhardt, Badrish Chandramouli, Darren Gehring, Niel Lebeck, Christopher Meiklejohn, Umar Farooq Minhas, Ryan Newton, Rahee Ghosh Peshawaria, Tal Zaccai, and Irene Zhang. A.M.B.R.O.S.I.A: providing performant virtual resiliency for distributed applications. *Proceedings of the VLDB Endowment*, 13(5):588–601, January 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3377369.3377370`.

Ouyang:2020:ESP

[2306] Dian Ouyang, Long Yuan, Lu Qin, Lijun Chang, Ying Zhang, and Xuemin Lin. Efficient shortest path index maintenance on dynamic road networks with theoretical guarantees. *Proceedings of the VLDB Endowment*, 13(5):602–615, January 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3377369.3377371`.

Stehle:2020:PMP

[2307] Elias Stehle and Hans-Arno Jacobsen. ParPaRaw: massively parallel parsing of delimiter-separated raw data. *Proceedings of the VLDB Endowment*, 13(5):616–628, January 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3377369.3377372`.

Huang:2020:OOC

[2308] Yihe Huang, William Qian, Eddie Kohler, Barbara Liskov, and Liuba Shrira. Opportunities for optimism in contended main-memory multicore transactions. *Proceedings of the VLDB Endowment*, 13(5):629–642, January 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3377369.3377373`.

Zheng:2020:PLF

[2309] Bolong Zheng, Xi Zhao, Lianggui Weng, Nguyen Quoc Viet Hung, Hang Liu, and Christian S. Jensen. PM-

LSH: a fast and accurate LSH framework for high-dimensional approximate NN search. *Proceedings of the VLDB Endowment*, 13(5):643–655, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377374.

Sun:2020:HMB

[2310] Yahui Sun, Jun Luo, Theodoros Lappas, Xiaokui Xiao, and Bin Cui. Hunting multiple bumps in graphs. *Proceedings of the VLDB Endowment*, 13(5):656–669, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377375.

Yang:2020:HNE

[2311] Renchi Yang, Jieming Shi, Xiaokui Xiao, Yin Yang, and Sourav S. Bhowmick. Homogeneous network embedding for massive graphs via reweighted personalized PageRank. *Proceedings of the VLDB Endowment*, 13(5):670–683, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377376.

Qahtan:2020:PFD

[2312] Abdulhakim Qahtan, Nan Tang, Mourad Ouzzani, Yang Cao, and Michael Stonebraker. Pattern functional dependencies for data cleaning. *Proceedings of the VLDB Endowment*, 13(5):684–697, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377377.

Whang:2020:MMV

[2313] Joyce Jiyoung Whang, Rundong Du, Sangwon Jung, Geon Lee, Barry Drake, Qingqing Liu, Seonggoo Kang, and Haesun Park. MEGA: multi-view semi-supervised clustering of hypergraphs. *Proceedings of the VLDB Endowment*, 13(5):698–711, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377378.

Koumarelas:2020:MDD

[2314] Ioannis Koumarelas, Thorsten Papenbrock, and Felix Naumann. MDedup: duplicate detection with matching dependencies. *Proceedings of the VLDB Endowment*, 13(5):712–725, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377379.

Tran:2020:PVU

[2315] Van-Dang Tran, Hiroyuki Kato, and Zhenjiang Hu. Programmable view update strategies on relations. *Proceedings of the VLDB Endowment*, 13(5):726–739, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377380.

Kumar:2020:ADD

[2316] Avinash Kumar, Zuozhi Wang, Shengquan Ni, and Chen Li. Amber: a debuggable dataflow system based on the actor model. *Proceedings of the VLDB Endowment*, 13(5):740–753, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377381.

Schiavio:2020:DSO

[2317] Filippo Schiavio, Daniele Bonetta, and Walter Binder. Dynamic speculative optimizations for SQL compilation in Apache Spark. *Proceedings of the VLDB Endowment*, 13 (5):754–767, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377382.

Khayati:2020:MGE

[2318] Mourad Khayati, Alberto Lerner, Zakhar Tymchenko, and Philippe Cudré-Mauroux. Mind the gap: an experimental evaluation of imputation of missing values techniques in time series. *Proceedings of the VLDB Endowment*, 13(5):768–782, January 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3377369.3377383.

Mofrad:2020:GNA

[2319] Mohammad Hasanzadeh Mofrad, Rami Melhem, Yousuf Ahmad, and Mohammad Hammoud. Graphite: a NUMA-aware HPC system for graph analytics based on a new MPI * X parallelism model. *Proceedings of the VLDB Endowment*, 13(6):783–797, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380751.

Boer:2020:PIA

[2320] Naama Boer, Daniel Deutch, Nave Frost, and Tova Milo. Personal insights for altering decisions of tree-based ensembles over time. *Proceedings of the VLDB Endowment*, 13 (6):798–811, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380752.

Peng:2020:ABS

[2321] You Peng, Ying Zhang, Xuemin Lin, Lu Qin, and Wenjie Zhang. Answering billion-scale label-constrained reachability queries within microsecond. *Proceedings of the VLDB Endowment*, 13(6):812–825, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380753.

Huang:2020:EER

[2322] Ruihong Huang, Shaoxu Song, Yunsu Lee, Jungho Park, Soo-Hyung Kim, and Sungmin Yi. Effective and efficient retrieval of structured entities. *Proceedings of the VLDB Endowment*, 13(6):826–839, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380754.

Sirin:2020:MAA

[2323] Utku Sirin and Anastasia Ailamaki. Micro-architectural analysis of OLAP: limitations and opportunities. *Proceedings of the VLDB Endowment*, 13(6):840–853, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380755.

Fang:2020:EEC

[2324] Yixiang Fang, Yixing Yang, Wenjie Zhang, Xuemin Lin, and Xin Cao. Effective and efficient community search over large heterogeneous information networks. *Proceedings of the VLDB Endowment*, 13(6):854–867, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380756.

Gupta:2020:RGS

[2325] Suyash Gupta, Sajjad Rahnama, Jelle Hellings, and Mohammad Sadoghi. ResilientDB: global scale resilient blockchain fabric. *Proceedings of the VLDB Endowment*, 13(6):868–883, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380757.

Funke:2020:DPQ

[2326] Henning Funke and Jens Teubner. Data-parallel query processing on non-uniform data. *Proceedings of the VLDB Endowment*, 13(6):884–897, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380758.

Feng:2020:EMH

[2327] Zonghao Feng and Qiong Luo. Evaluating memory-hard proof-of-work algorithms on three processors. *Proceedings of the VLDB Endowment*, 13(6):898–911, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380759.

Lee:2020:ASW

[2328] Seokki Lee, Bertram Ludäscher, and Boris Glavic. Approximate summaries for why and why-not provenance. *Proceedings of the VLDB Endowment*, 13(6):912–924, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380760.

Jiang:2020:PAD

[2329] Hao Jiang, Chunwei Liu, Qi Jin, John Paparrizos, and Aaron J. Elmore. PIDS: attribute decomposition for improved compression and query performance in columnar storage. *Proceedings of the VLDB Endowment*, 13(6):925–938, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380761.

Asudeh:2020:DCP

[2330] Abolfazl Asudeh, H. V. Jagadish, You (Will) Wu, and Cong Yu. On detecting cherry-picked trendlines. *Proceedings of the VLDB Endowment*, 13(6):939–952, February 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3380750.3380762.

Ota:2020:DDD

[2331] Masayo Ota, Heiko Müller, Juliana Freire, and Divesh Srivastava. Data-driven domain discovery for structured datasets. *Proceedings of the VLDB Endowment*, 13(7):953–965, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384346.

Shi:2020:RIF

[2332] Jieming Shi, Tianyuan Jin, Renchi Yang, Xiaokui Xiao, and Yin Yang. Realtime index-free single source SimRank processing on web-scale graphs. *Proceedings of the VLDB Endowment*, 13(7):966–978, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384347.

Wang:2020:DAR

[2333] Jiachuan Wang, Peng Cheng, Libin Zheng, Chao Feng, Lei Chen, Xuemin Lin, and Zheng Wang. Demand-aware route planning for shared mobility services. *Proceedings of the VLDB Endowment*, 13(7):979–991, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384348.

Hilprecht:2020:DLD

[2334] Benjamin Hilprecht, Andreas Schmidt, Moritz Kulessa, Alejandro Molina, Kristian Kersting, and Carsten Binnig. DeepDB: learn from data, not from queries! *Proceedings of the VLDB Endowment*, 13(7):992–1005, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384349.

Wang:2020:DMU

[2335] Yuepeng Wang, Rushi Shah, Abby Criswell, Rong Pan, and Isil Dillig. Data migration using datalog program synthesis. *Proceedings of the VLDB Endowment*, 13(7):1006–1019, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384350.

Zhu:2020:LTG

[2336] Xiaowei Zhu, Guanyu Feng, Marco Serafini, Xiaosong Ma, Jiping Yu, Lei Xie, Ashraf Aboulnaga, and Wenguang Chen. LiveGraph: a transactional graph storage system with purely sequential adjacency list scans. *Proceedings of the VLDB Endowment*, 13(7):1020–1034, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384351.

Lin:2020:KKB

[2337] Xueling Lin, Haoyang Li, Hao Xin, Zijian Li, and Lei Chen. KBPearl: a knowledge base population system supported by joint entity and relation linking. *Proceedings of the VLDB Endowment*, 13(7):1035–1049, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384352.

Li:2020:CUT

[2338] Tianyi Li, Ruikai Huang, Lu Chen, Christian S. Jensen, and Torben Bach Pedersen. Compression of uncertain trajectories in road networks. *Proceedings of the VLDB Endowment*, 13(7):1050–1063, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384353.

Shastri:2020:UBI

[2339] Supreeth Shastri, Vinay Banakar, Melissa Wasserman, Arun Kumar, and Vijay Chidambaram. Understanding and benchmarking the impact of GDPR on database systems. *Proceedings of the VLDB Endowment*, 13(7):1064–1077, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384354.

Liu:2020:LOP

[2340] Jihang Liu, Shimin Chen, and Lujun Wang. LB+Trees: optimizing persistent index performance on 3DXPoint memory. *Proceedings of the VLDB Endowment*, 13(7):1078–1090, March 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3384345.3384355.

Lersch:2020:ELT

[2341] Lucas Lersch, Ivan Schreter, Ismail Oukid, and Wolfgang Lehner. Enabling low tail latency on multicore key-value stores. *Proceedings of the VLDB Endowment*, 13(7):1091–1104, March 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3384345.3384356`.

Lin:2020:PAA

[2342] Chunbin Lin, Etienne Boursier, and Yannis Papakonstantinou. Plato: approximate analytics over compressed time series with tight deterministic error guarantees. *Proceedings of the VLDB Endowment*, 13 (7):1105–1118, March 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3384345.3384357`.

Gera:2020:TLG

[2343] Prasun Gera, Hyojong Kim, Piyush Sao, Hyesoon Kim, and David Bader. Traversing large graphs on GPUs with unified memory. *Proceedings of the VLDB Endowment*, 13 (7):1119–1133, March 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3384345.3384358`.

Ping:2020:SHQ

[2344] Haoyue Ping, Julia Stoyanovich, and Benny Kimelfeld. Supporting hard queries over probabilistic preferences. *Proceedings of the VLDB Endowment*, 13(7):1134–1146, March 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3384345.3384359`.

Lu:2020:DSH

[2345] Baotong Lu, Xiangpeng Hao, Tianzheng Wang, and Eric Lo. Dash: scalable hashing on persistent memory. *Proceedings of the VLDB Endowment*, 13(8):1147–1161, April 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3389133.3389134`.

Ferragina:2020:PIF

[2346] Paolo Ferragina and Giorgio Vinciguerra. The PGM-index: a fully-dynamic compressed learned index with provable worst-case bounds. *Proceedings of the VLDB Endowment*, 13(8):1162–1175, April 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3389133.3389135`.

Ma:2020:DRC

[2347] Minghua Ma, Zheng Yin, Shenglin Zhang, Sheng Wang, Christopher Zheng, Xinhao Jiang, Hanwen Hu, Cheng Luo, Yilin Li, Nengjun Qiu, Feifei Li, Changcheng Chen, and Dan Pei. Diagnosing root causes of intermittent slow queries in cloud databases. *Proceedings of the VLDB Endowment*, 13(8):1176–1189, April 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3389133.3389136`.

Chen:2020:PEF

[2348] Xuhao Chen, Roshan Dathathri, Gurbinder Gill, and Keshav Pingali. Pangolin: an efficient and flexible graph mining system on CPU and GPU. *Proceedings of the VLDB Endowment*, 13(8):1190–1205, April 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3389133.3389137`.

Dreseler:2020:QTH

[2349] Markus Dreseler, Martin Boissier, Tilmann Rabl, and Matthias Uflacker. Quantifying TPC-H choke points and their optimizations. *Proceedings of the VLDB Endowment*, 13 (8):1206–1220, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389138.

Li:2020:EAC

[2350] Yuanbing Li, Xian Wu, Yifei Jin, Jian Li, and Guoliang Li. Efficient algorithms for crowd-aided categorization. *Proceedings of the VLDB Endowment*, 13(8):1221–1233, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389139.

Wang:2020:SVD

[2351] Shaowei Wang, Yuqiu Qian, Jiachun Du, Wei Yang, Liusheng Huang, and Hongli Xu. Set-valued data publication with local privacy: tight error bounds and efficient mechanisms. *Proceedings of the VLDB Endowment*, 13(8):1234–1247, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389140.

Fegaras:2020:TAB

[2352] Leonidas Fegaras and Hasanuzzaman Noor. Translation of array-based loops to distributed data-parallel programs. *Proceedings of the VLDB Endowment*, 13(8):1248–1260, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389141.

Fan:2020:IGP

[2353] Wenfei Fan, Muyang Liu, Chao Tian, Ruiqi Xu, and Jingren Zhou. Incrementalization of graph partitioning algorithms. *Proceedings of the VLDB Endowment*, 13(8):1261–1274, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389142.

Ko:2020:OIS

[2354] Shao-Heng Ko, Hsu-Chao Lai, Hong-Han Shuai, Wang-Chien Lee, Philip S. Yu, and De-Nian Yang. Optimizing item and subgroup configurations for social-aware VR shopping. *Proceedings of the VLDB Endowment*, 13(8):1275–1289, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389143.

Savvides:2020:ECP

[2355] Savvas Savvides, Darshika Khandelwal, and Patrick Eugster. Efficient confidentiality-preserving data analytics over symmetrically encrypted datasets. *Proceedings of the VLDB Endowment*, 13(8):1290–1303, April 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3389133.3389144.

Gill:2020:SMG

[2356] Gurbinder Gill, Roshan Dathathri, Loc Hoang, Ramesh Peri, and Keshav Pingali. Single machine graph analytics on massive datasets using Intel Optane DC Persistent Memory. *Proceedings of the VLDB Endowment*, 13(8):1304–1318, April 2020. CODEN ???? ISSN 2150-8097.

URL https://dl.acm.org/doi/abs/10.14778/3389133.3389145.

Zakhary:2020:ACA

[2357] Victor Zakhary, Divyakant Agrawal, and Amr El Abbadi. Atomic commitment across blockchains. *Proceedings of the VLDB Endowment*, 13(9):1319–1331, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397231.

Mathew:2020:HSM

[2358] Ajit Mathew and Changwoo Min. HydraList: a scalable in-memory index using asynchronous updates and partial replication. *Proceedings of the VLDB Endowment*, 13(9):1332–1345, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397232.

Davis:2020:EMP

[2359] A. Jesse Jiryu Davis, Max Hirschhorn, and Judah Schvimer. Extreme modelling in practice. *Proceedings of the VLDB Endowment*, 13(9):1346–1358, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397233.

Lyu:2020:MBS

[2360] Bingqing Lyu, Lu Qin, Xuemin Lin, Ying Zhang, Zhengping Qian, and Jingren Zhou. Maximum biclique search at billion scale. *Proceedings of the VLDB Endowment*, 13(9):1359–1372, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397234.

Chepurko:2020:AAR

[2361] Nadiia Chepurko, Ryan Marcus, Emanuel Zgraggen, Raul Castro Fernandez, Tim Kraska, and David Karger. ARDA: automatic relational data augmentation for machine learning. *Proceedings of the VLDB Endowment*, 13(9):1373–1387, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397235.

Alkowaileet:2020:LBT

[2362] Wail Y. Alkowaileet, Sattam Alsubaiee, and Michael J. Carey. An LSM-based tuple compaction framework for Apache AsterixDB. *Proceedings of the VLDB Endowment*, 13(9):1388–1400, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397236.

Shraga:2020:ACD

[2363] Roee Shraga, Avigdor Gal, and Haggai Roitman. ADnEV: cross-domain schema matching using deep similarity matrix adjustment and evaluation. *Proceedings of the VLDB Endowment*, 13(9):1401–1415, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397237.

Zhou:2020:QPP

[2364] Xuanhe Zhou, Ji Sun, Guoliang Li, and Jianhua Feng. Query performance prediction for concurrent queries using graph embedding. *Proceedings of the VLDB Endowment*, 13(9):1416–1428, May 2020. CODEN ???? ISSN 2150-8097.

URL https://dl.acm.org/doi/abs/10.14778/3397230.3397238.

Alquraan:2020:SNZ

[2365] Ahmed Alquraan, Alex Kogan, Virendra J. Marathe, and Samer Al-Kiswany. Scalable, near-zero loss disaster recovery for distributed data stores. *Proceedings of the VLDB Endowment*, 13(9):1429–1442, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397239.

Lu:2020:VAN

[2366] Kejing Lu, Hongya Wang, Wei Wang, and Mineichi Kudo. VHP: approximate nearest neighbor search via virtual hypersphere partitioning. *Proceedings of the VLDB Endowment*, 13(9):1443–1455, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397240.

Kim:2020:IFS

[2367] Hyunjoon Kim, Seunghwan Min, Kunsoo Park, Xuemin Lin, Seok-Hee Hong, and Wook-Shin Han. IDAR: fast supergraph search using DAG integration. *Proceedings of the VLDB Endowment*, 13(9):1456–1468, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397241.

Seleznova:2020:GEU

[2368] Mariia Seleznova, Behrooz Omidvar-Tehrani, Sihem Amer-Yahia, and Eric Simon. Guided exploration of user groups. *Proceedings of the VLDB Endowment*, 13(9):1469–1482, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397242.

Gong:2020:IID

[2369] Long Gong, Huayi Wang, Mitsunori Ogihara, and Jun Xu. iDEC: indexable distance estimating codes for approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 13(9):1483–1497, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397243.

Bian:2020:EAB

[2370] Song Bian, Qintian Guo, Sibo Wang, and Jeffrey Xu Yu. Efficient algorithms for budgeted influence maximization on massive social networks. *Proceedings of the VLDB Endowment*, 13(9):1498–1510, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397244.

Prateek:2020:MTK

[2371] Arneish Prateek, Arijit Khan, Akshit Goyal, and Sayan Ranu. Mining top-k pairs of correlated subgraphs in a large network. *Proceedings of the VLDB Endowment*, 13(9):1511–1524, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397245.

Buchnik:2020:FHT

[2372] Yehonatan Buchnik and Roy Friedman. FireLedger: a high throughput blockchain consensus protocol. *Proceedings of the VLDB Endowment*, 13(9):1525–1539, May 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/abs/10.14778/3397230.3397246.

Wang:2020:PEF

[2373] Kefei Wang, Jian Liu, and Feng Chen. Put an elephant into a fridge: optimizing cache efficiency for in-memory key–value stores. *Proceedings of the VLDB Endowment*, 13(9):1540–1554, May 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3397230.3397247`.

Pedersen:2020:ASR

[2374] Simon Aagaard Pedersen, Bin Yang, and Christian S. Jensen. Anytime stochastic routing with hybrid learning. *Proceedings of the VLDB Endowment*, 13(9):1555–1567, May 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3397230.3397248`.

Zhang:2020:UED

[2375] Qizhen Zhang, Yifan Cai, Xinyi Chen, Sebastian Angel, Ang Chen, Vincent Liu, and Boon Thau Loo. Understanding the effect of data center resource disaggregation on production DBMSs. *Proceedings of the VLDB Endowment*, 13(9):1568–1581, May 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3397230.3397249`.

Tziavelis:2020:OAR

[2376] Nikolaos Tziavelis, Deepak Ajwani, Wolfgang Gatterbauer, Mirek Riedewald, and Xiaofeng Yang. Optimal algorithms for ranked enumeration of answers to full conjunctive queries. *Proceedings of the VLDB Endowment*, 13(9):1582–1597, May 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3397230.3397250`.

Dhulipala:2020:SPS

[2377] Laxman Dhulipala, Charles McGuffey, Hongbo Kang, Yan Gu, Guy E. Blelloch, Phillip B. Gibbons, and Julian Shun. Sage: parallel semi-asymmetric graph algorithms for NVRAMs. *Proceedings of the VLDB Endowment*, 13(9):1598–1613, May 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/abs/10.14778/3397230.3397251`.

Zhu:2020:PIN

[2378] Yuqing Zhu, Jing Tang, and Xueyan Tang. Pricing influential nodes in online social networks. *Proceedings of the VLDB Endowment*, 13(10):1614–1627, June 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3401960.3401961`.

Sun:2020:KSA

[2379] Bintao Sun, Maximilien Danisch, T-H. Hubert Chan, and Mauro Sozio. KClist++: a simple algorithm for finding k-clique densest subgraphs in large graphs. *Proceedings of the VLDB Endowment*, 13(10):1628–1640, June 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3401960.3401962`.

Wellenzohn:2020:DIC

[2380] Kevin Wellenzohn, Michael H. Böhlen, and Sven Helmer. Dynamic interleaving of content and structure for robust indexing of semi-structured hierarchical data. *Proceedings of the VLDB Endowment*, 13(10):1641–1653, June 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3401960.3401963`.

Agarwal:2020:CGS

[2381] Shubhangi Agarwal, Sourav Dutta, and Arnab Bhattacharya. ChiSeL: graph similarity search using chi-squared statistics in large probabilistic graphs. *Proceedings of the VLDB Endowment*, 13(10):1654–1668, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401964.

Tan:2020:FID

[2382] Zijing Tan, Ai Ran, Shuai Ma, and Sheng Qin. Fast incremental discovery of pointwise order dependencies. *Proceedings of the VLDB Endowment*, 13(10):1669–1681, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401965.

Livshits:2020:ADC

[2383] Ester Livshits, Alireza Heidari, Ihab F. Ilyas, and Benny Kimelfeld. Approximate denial constraints. *Proceedings of the VLDB Endowment*, 13(10):1682–1695, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401966.

Rehrmann:2020:SOO

[2384] Robin Rehrmann, Carsten Binnig, Alexander Böhm, Kihong Kim, and Wolfgang Lehner. Sharing opportunities for OLTP workloads in different isolation levels. *Proceedings of the VLDB Endowment*, 13(10):1696–1708, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401967.

Neumann:2020:BBM

[2385] Stefan Neumann and Pauli Miettinen. Biclustering and Boolean matrix factorization in data streams. *Proceedings of the VLDB Endowment*, 13(10):1709–1722, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401968.

Jian:2020:EER

[2386] Xun Jian, Yue Wang, and Lei Chen. Effective and efficient relational community detection and search in large dynamic heterogeneous information networks. *Proceedings of the VLDB Endowment*, 13(10):1723–1736, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401969.

Kim:2020:NLS

[2387] Hyeonji Kim, Byeong-Hoon So, Wook-Shin Han, and Hongrae Lee. Natural language to SQL: where are we today? *Proceedings of the VLDB Endowment*, 13(10):1737–1750, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401970.

Che:2020:ATD

[2388] Yulin Che, Zhuohang Lai, Shixuan Sun, Yue Wang, and Qiong Luo. Accelerating truss decomposition on heterogeneous processors. *Proceedings of the VLDB Endowment*, 13(10):1751–1764, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401971.

Mukherjee:2020:SDS

[2389] Rohan Mukherjee, Swarat Chaudhuri, and Chris Jermaine. Searching a database of source codes using contextualized code search. *Proceedings of the VLDB Endowment*, 13(10):1765–1778, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401972.

Li:2020:DSE

[2390] Yan Li, Tingjian Ge, and Cindy Chen. Data stream event prediction based on timing knowledge and state transitions. *Proceedings of the VLDB Endowment*, 13(10):1779–1792, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401973.

McSherry:2020:SAP

[2391] Frank McSherry, Andrea Lattuada, Malte Schwarzkopf, and Timothy Roscoe. Shared arrangements: practical inter-query sharing for streaming dataflows. *Proceedings of the VLDB Endowment*, 13(10):1793–1806, June 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3401960.3401974.

Gupta:2020:SBD

[2392] Peeyush Gupta, Michael J. Carey, Sharad Mehrotra, and oberto Yus. SmartBench: a benchmark for data management in smart spaces. *Proceedings of the VLDB Endowment*, 13(12):1807–1820, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407791.

Boniol:2020:SGB

[2393] Paul Boniol and Themis Palpanas. Series2Graph: graph-based subsequence anomaly detection for time series. *Proceedings of the VLDB Endowment*, 13(12):1821–1834, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407792.

Zhang:2020:SCS

[2394] Dan Zhang, Madelon Hulsebos, Yoshihiko Suhara, Çagatay Demiralp, Jinfeng Li, and Wang-Chiew Tan. Sato: contextual semantic type detection in tables. *Proceedings of the VLDB Endowment*, 13(12):1835–1848, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407793.

He:2020:TTP

[2395] Qijian He, Wei Yang, Bingren Chen, Yangyang Geng, and Liusheng Huang. TransNet: training privacy-preserving neural network over transformed layer. *Proceedings of the VLDB Endowment*, 13(12):1849–1862, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407794.

Fan:2020:CAG

[2396] Wenfei Fan, Ruochun Jin, Muyang Liu, Ping Lu, Chao Tian, and Jingren Zhou. Capturing associations in graphs. *Proceedings of the VLDB Endowment*, 13(12):1863–1876, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407795.

Renz-Wieland:2020:DPA

[2397] Alexander Renz-Wieland, Rainer Gemulla, Steffen Zeuch, and Volker Markl. Dynamic parameter allocation in parameter servers. *Proceedings of the VLDB Endowment*, 13(12): 1877–1890, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407796`.

Freitag:2020:AWC

[2398] Michael Freitag, Maximilian Bandle, Tobias Schmidt, Alfons Kemper, and Thomas Neumann. Adopting worst-case optimal joins in relational database systems. *Proceedings of the VLDB Endowment*, 13(12):1891–1904, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407797`.

McKenna:2020:WAM

[2399] Ryan McKenna, Raj Kumar Maity, Arya Mazumdar, and Gerome Miklau. A workload-adaptive mechanism for linear queries under local differential privacy. *Proceedings of the VLDB Endowment*, 13(12):1905–1918, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407798`.

Wang:2020:SSP

[2400] Yisu Remy Wang, Shana Hutchison, Jonathan Leang, Bill Howe, and Dan Suciu. SPORES: sum-product optimization via relational equality saturation for large scale linear algebra. *Proceedings of the VLDB Endowment*, 13(12):1919–1932, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407799`.

Fernandez:2020:DMP

[2401] Raul Castro Fernandez, Pranav Subramaniam, and Michael J. Franklin. Data market platforms: trading data assets to solve data problems. *Proceedings of the VLDB Endowment*, 13(12):1933–1947, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407800`.

Mahdavi:2020:BEE

[2402] Mohammad Mahdavi and Ziawasch Abedjan. Baran: effective error correction via a unified context representation and transfer learning. *Proceedings of the VLDB Endowment*, 13(12):1948–1961, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407801`.

Fan:2020:RDS

[2403] Ju Fan, Junyou Chen, Tongyu Liu, Yuwei Shen, Guoliang Li, and Xiaoyong Du. Relational data synthesis using generative adversarial networks: a design space exploration. *Proceedings of the VLDB Endowment*, 13(12): 1962–1975, August 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3407790.3407802`.

Yang:2020:LLP

[2404] Lei Yang, Hong Wu, Tieying Zhang, Xuntao Cheng, Feifei Li, Lei Zou, Yujie Wang, Rongyao Chen, Jianying Wang, and Gui Huang. Leaper: a learned prefetcher for cache invalidation in LSM-tree based storage engines. *Proceedings of the VLDB Endowment*, 13(12):1976–1989, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407803.

Kang:2020:ASG

[2405] Daniel Kang, Edward Gan, Peter Bailis, Tatsunori Hashimoto, and Matei Zaharia. Approximate selection with guarantees using proxies. *Proceedings of the VLDB Endowment*, 13(12):1990–2003, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407804.

Kang:2020:EIC

[2406] Minji Kang, Soyee Choi, Gihwan Oh, and Sang-Won Lee. 2R: efficiently isolating cold pages in flash storages. *Proceedings of the VLDB Endowment*, 13(12):2004–2017, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407805.

Bashardoost:2020:KT

[2407] Bahar Ghadiri Bashardoost, Renée J. Miller, Kelly Lyons, and Fatemeh Nargesian. Knowledge translation. *Proceedings of the VLDB Endowment*, 13(12):2018–2032, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407806.

Petersohn:2020:TSD

[2408] Devin Petersohn, Stephen Macke, Doris Xin, William Ma, Doris Lee, Xiangxi Mo, Joseph E. Gonzalez, Joseph M. Hellerstein, Anthony D. Joseph, and Aditya Parameswaran. Towards scalable dataframe systems. *Proceedings of the VLDB Endowment*, 13(12):2033–2046, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407807.

Lu:2020:AFP

[2409] Yi Lu, Xiangyao Yu, Lei Cao, and Samuel Madden. Aria: a fast and practical deterministic OLTP database. *Proceedings of the VLDB Endowment*, 13(12):2047–2060, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407808.

Miao:2020:COS

[2410] Dongjing Miao, Zhipeng Cai, Jianzhong Li, Xiangyu Gao, and Xianmin Liu. The computation of optimal subset repairs. *Proceedings of the VLDB Endowment*, 13(12):2061–2074, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407809.

Christodoulakis:2020:PPB

[2411] Christina Christodoulakis, Eric B. Munson, Moshe Gabel, Angela Demke Brown, and Renée J. Miller. Pytheas: pattern-based table discovery in CSV files. *Proceedings of the VLDB Endowment*, 13(12):2075–2089, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407810.

Wu:2020:PPV

[2412] Yuncheng Wu, Shaofeng Cai, Xiaokui Xiao, Gang Chen, and Beng Chin Ooi. Privacy preserving vertical federated learning for tree-based models. *Proceedings of the VLDB Endowment*, 13(12):2090–2103, August

2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407811.

Al-Baghdadi:2020:TBC

[2413] Ahmed Al-Baghdadi and Xiang Lian. Topic-based community search over spatial-social networks. *Proceedings of the VLDB Endowment*, 13(12): 2104–2117, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407812.

Fritz:2020:LME

[2414] Manuel Fritz, Michael Behringer, and Holger Schwarz. LOG-Means: efficiently estimating the number of clusters in large datasets. *Proceedings of the VLDB Endowment*, 13(12): 2118–2131, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407813.

Krastnikov:2020:EOD

[2415] Simeon Krastnikov, Florian Kerschbaum, and Douglas Stebila. Efficient oblivious database joins. *Proceedings of the VLDB Endowment*, 13 (12):2132–2145, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407814.

Issa:2020:ETQ

[2416] Ousmane Issa, Angela Bonifati, and Farouk Toumani. Evaluating top-k queries with inconsistency degrees. *Proceedings of the VLDB Endowment*, 13(12):2146–2158, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407815.

Nakandala:2020:CDS

[2417] Supun Nakandala, Yuhao Zhang, and Arun Kumar. Cerebro: a data system for optimized deep learning model selection. *Proceedings of the VLDB Endowment*, 13(12):2159–2173, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407816. See errata [2550].

Gan:2020:COP

[2418] Edward Gan, Peter Bailis, and Moses Charikar. CoopStore: optimizing precomputed summaries for aggregation. *Proceedings of the VLDB Endowment*, 13(12):2174–2187, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407817.

Koide:2020:FSS

[2419] Satoshi Koide, Chuan Xiao, and Yoshiharu Ishikawa. Fast subtrajectory similarity search in road networks under weighted edit distance constraints. *Proceedings of the VLDB Endowment*, 13(12):2188–2201, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407818.

Liu:2020:SAG

[2420] Yu Liu, Lei Zou, Qian Ge, and Zhewei Wei. SimTab: accuracy-guaranteed SimRank queries through tighter confidence bounds and multi-armed bandits. *Proceedings of the VLDB Endowment*, 13(12):2202–2214, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407819.

Dutt:2020:EAS

[2421] Anshuman Dutt, Chi Wang, Vivek Narasayya, and Surajit Chaudhuri. Efficiently approximating selectivity functions using low overhead regression models. *Proceedings of the VLDB Endowment*, 13(12):2215–2228, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407820.

Lin:2020:IID

[2422] Yin Lin, Yifan Guan, Abolfazl Asudeh, and H. V. Jagadish. Identifying insufficient data coverage in databases with multiple relations. *Proceedings of the VLDB Endowment*, 13(12):2229–2242, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407821.

Li:2020:CMA

[2423] Lingxiao Li, Muhammad Aamir Cheema, Mohammed Eunus Ali, Hua Lu, and David Taniar. Continuously monitoring alternative shortest paths on road networks. *Proceedings of the VLDB Endowment*, 13(12):2243–2255, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407822.

Lee:2020:HMC

[2424] Geon Lee, Jihoon Ko, and Kijung Shin. Hypergraph motifs: concepts, algorithms, and discoveries. *Proceedings of the VLDB Endowment*, 13(12): 2256–2269, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407823.

Birnick:2020:HSE

[2425] Johann Birnick, Thomas Bläsius, Tobias Friedrich, Felix Naumann, Thorsten Papenbrock, and Martin Schirneck. Hitting set enumeration with partial information for unique column combination discovery. *Proceedings of the VLDB Endowment*, 13 (12):2270–2283, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407824.

Chen:2020:SDS

[2426] Yue Chen, Zhida Chen, Gao Cong, Ahmed R. Mahmood, and Walid G. Aref. SSTD: a distributed system on streaming spatio-textual data. *Proceedings of the VLDB Endowment*, 13 (12):2284–2296, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407825.

Mohammed:2020:CPI

[2427] Haneen Mohammed, Ziyun Wei, Eugene Wu, and Ravi Netravali. Continuous prefetch for interactive data applications. *Proceedings of the VLDB Endowment*, 13(12):2297–2311, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407826.

Wang:2020:EES

[2428] Zheng Wang, Cheng Long, Gao Cong, and Yiding Liu. Efficient and effective similar subtrajectory search with deep reinforcement learning. *Proceedings of the VLDB Endowment*, 13(12): 2312–2325, August 2020. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3407790.3407827.

Sun:2020:BSE

[2429] Zequn Sun, Qingheng Zhang, Wei Hu, Chengming Wang, Muhao Chen, Farahnaz Akrami, and Chengkai Li. A benchmarking study of embedding-based entity alignment for knowledge graphs. *Proceedings of the VLDB Endowment*, 13(12):2326–2340, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407828.

Qi:2020:ELS

[2430] Jianzhong Qi, Guanli Liu, Christian S. Jensen, and Lars Kulik. Effectively learning spatial indices. *Proceedings of the VLDB Endowment*, 13(12):2341–2354, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407829.

Liu:2020:SLB

[2431] Qiyu Liu, Libin Zheng, Yanyan Shen, and Lei Chen. Stable learned bloom filters for data streams. *Proceedings of the VLDB Endowment*, 13(12):2355–2367, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407830.

Jin:2020:ATL

[2432] Zhongjun Jin, Yeye He, and Surajit Chauduri. Auto-transform: learning-to-transform by patterns. *Proceedings of the VLDB Endowment*, 13(12):2368–2381, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407831.

Kossmann:2020:MMM

[2433] Jan Kossmann, Stefan Halfpap, Marcel Jankrift, and Rainer Schlosser. Magic mirror in my hand, which is the best in the land?: an experimental evaluation of index selection algorithms. *Proceedings of the VLDB Endowment*, 13(12):2382–2395, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407832.

Damme:2020:MAQ

[2434] Patrick Damme, Annett Ungethüm, Johannes Pietrzyk, Alexander Krause, Dirk Habich, and Wolfgang Lehner. MorphStore: analytical query engine with a holistic compression-enabled processing model. *Proceedings of the VLDB Endowment*, 13(12):2396–2410, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407833.

Parchas:2020:FED

[2435] Panos Parchas, Yonatan Naamad, Peter Van Bouwel, Christos Faloutsos, and Michalis Petropoulos. Fast and effective distribution-key recommendation for Amazon Redshift. *Proceedings of the VLDB Endowment*, 13(12):2411–2423, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407834.

Pappachan:2020:SMA

[2436] Primal Pappachan, Roberto Yus, Sharad Mehrotra, and Johann-Christoph Freytag. Sieve: a middleware approach to scalable access control for database management systems. *Proceedings of the VLDB Endowment*, 13

(12):2424–2437, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407835.

Sreekanti:2020:CSF

[2437] Vikram Sreekanti, Chenggang Wu, Xiayue Charles Lin, Johann Schleier-Smith, Joseph E. Gonzalez, Joseph M. Hellerstein, and Alexey Tumanov. Cloudburst: stateful functions-as-a-service. *Proceedings of the VLDB Endowment*, 13(12):2438–2452, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407836.

Suprem:2020:OAD

[2438] Abhijit Suprem, Joy Arulraj, Calton Pu, and Joao Ferreira. ODIN: automated drift detection and recovery in video analytics. *Proceedings of the VLDB Endowment*, 13(12):2453–2465, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407837.

Piao:2020:MRA

[2439] Chengzhi Piao, Weiguo Zheng, Yu Rong, and Hong Cheng. Maximizing the reduction ability for near-maximum independent set computation. *Proceedings of the VLDB Endowment*, 13(12):2466–2478, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407838.

Chen:2020:FTA

[2440] Zhao Chen, Peng Cheng, Lei Chen, Xuemin Lin, and Cyrus Shahabi. Fair task assignment in spatial crowdsourcing. *Proceedings of the VLDB Endowment*, 13(12):2479–2492, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407839.

Zhang:2020:DSC

[2441] Hao Zhang, Jeffrey Xu Yu, Yikai Zhang, Kangfei Zhao, and Hong Cheng. Distributed subgraph counting: a general approach. *Proceedings of the VLDB Endowment*, 13(12):2493–2507, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407840.

Karagiannis:2020:SMI

[2442] Georgios Karagiannis, Mohammed Saeed, Paolo Papotti, and Immanuel Trummer. Scrutinizer: a mixed-initiative approach to large-scale, data-driven claim verification. *Proceedings of the VLDB Endowment*, 13(12):2508–2521, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407841.

Krivosheev:2020:DPC

[2443] Evgeny Krivosheev, Siarhei Bykau, Fabio Casati, and Sunil Prabhakar. Detecting and preventing confused labels in crowdsourced data. *Proceedings of the VLDB Endowment*, 13(12):2522–2535, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407842.

Li:2020:OHC

[2444] Rong-Hua Li, Sen Gao, Lu Qin, Guoren Wang, Weihua Yang, and Jeffrey Xu Yu. Ordering heuristics for k-clique listing. *Proceedings of the VLDB Endowment*, 13(12):2536–2548, August

2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407843.

Li:2020:DSM

[2445] Jinfeng Li, Yuliang Li, Xiaolan Wang, and Wang-Chiew Tan. Deep or simple models for semantic tagging?: it depends on your data. *Proceedings of the VLDB Endowment*, 13(12):2549–2562, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407844.

Bilal:2020:DBC

[2446] Muhammad Bilal, Marco Serafini, Marco Canini, and Rodrigo Rodrigues. Do the best cloud configurations grow on trees?: an experimental evaluation of black box algorithms for optimizing cloud workloads. *Proceedings of the VLDB Endowment*, 13(12):2563–2575, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407845.

Zhou:2020:FLD

[2447] Alexander Zhou, Yue Wang, and Lei Chen. Finding large diverse communities on networks: the edge maximum $k*$-partite clique. *Proceedings of the VLDB Endowment*, 13(12):2576–2589, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407846.

vanderLinde:2020:PCS

[2448] Albert van der Linde, João Leitão, and Nuno Preguiça. Practical client-side replication: weak consistency semantics for insecure settings. *Proceedings of the VLDB Endowment*, 13 (12):2590–2605, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407847.

Rong:2020:APS

[2449] Kexin Rong, Yao Lu, Peter Bailis, Srikanth Kandula, and Philip Levis. Approximate partition selection for big-data workloads using summary statistics. *Proceedings of the VLDB Endowment*, 13(12):2606–2619, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407848.

Winter:2020:MMH

[2450] Christian Winter, Tobias Schmidt, Thomas Neumann, and Alfons Kemper. Meet me halfway: split maintenance of continuous views. *Proceedings of the VLDB Endowment*, 13 (12):2620–2633, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407849.

Chen:2020:UPB

[2451] Youmin Chen, Youyou Lu, Kedong Fang, Qing Wang, and Jiwu Shu. uTree: a persistent B+-tree with low tail latency. *Proceedings of the VLDB Endowment*, 13(12):2634–2648, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407850.

Boncz:2020:FFR

[2452] Peter Boncz, Thomas Neumann, and Viktor Leis. FSST: fast random access string compression. *Proceedings of the VLDB Endowment*, 13(12):2649–2661, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407851.

Vogel:2020:MBC

[2453] Lukas Vogel, Viktor Leis, Alexander van Renen, Thomas Neumann, Satoshi Imamura, and Alfons Kemper. Mosaic: a budget-conscious storage engine for relational database systems. *Proceedings of the VLDB Endowment*, 13(12):2662–2675, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407852.

Blanusa:2020:MCE

[2454] Jovan Blanusa, Radu Stoica, Paolo Ienne, and Kubilay Atasu. Manycore clique enumeration with fast set intersections. *Proceedings of the VLDB Endowment*, 13(12):2676–2690, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407853.

Bater:2020:SPP

[2455] Johes Bater, Yongjoo Park, Xi He, Xiao Wang, and Jennie Rogers. SAQE: practical privacy-preserving approximate query processing for data federations. *Proceedings of the VLDB Endowment*, 13(12):2691–2705, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407854.

Kuhlman:2020:RAA

[2456] Caitlin Kuhlman and Elke Rundensteiner. Rank aggregation algorithms for fair consensus. *Proceedings of the VLDB Endowment*, 13(12):2706–2719, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407855.

Glasbergen:2020:SUA

[2457] Brad Glasbergen, Michael Abebe, Khuzaima Daudjee, and Amit Levi. Sentinel: universal analysis and insight for data systems. *Proceedings of the VLDB Endowment*, 13(12):2720–2733, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407856.

Fang:2020:ODC

[2458] Jingzhi Fang, Yanyan Shen, Yue Wang, and Lei Chen. Optimizing DNN computation graph using graph substitutions. *Proceedings of the VLDB Endowment*, 13(12):2734–2746, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407857.

Sen:2020:ANL

[2459] Jaydeep Sen, Chuan Lei, Abdul Quamar, Fatma Özcan, Vasilis Efthymiou, Ayushi Dalmia, Greg Stager, Ashish Mittal, Diptikalyan Saha, and Karthik Sankaranarayanan. ATHENA++: natural language querying for complex nested SQL queries. *Proceedings of the VLDB Endowment*, 13(12):2747–2759, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407858.

Xu:2020:CAD

[2460] Min Xu, Bolin Ding, Tianhao Wang, and Jingren Zhou. Collecting and analyzing data jointly from multiple services under local differential privacy. *Proceedings of the VLDB Endowment*, 13(12):2760–2772, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407859.

Gan:2020:IDA

[2461] Yifan Gan, Xueyuan Ren, Drew Ripberger, Spyros Blanas, and Yang Wang. IsoDiff: debugging anomalies caused by weak isolation. *Proceedings of the VLDB Endowment*, 13(12):2773–2786, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407860.

Barsky:2020:SRN

[2462] Marina Barsky, Jonathan Gabor, Mariano P. Consens, and Alex Thomo. Suffix rank: a new scalable algorithm for indexing large string collections. *Proceedings of the VLDB Endowment*, 13(12):2787–2800, August 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3407790.3407861.

Haritsa:2020:RQP

[2463] Jayant R. Haritsa. Robust query processing: mission possible. *Proceedings of the VLDB Endowment*, 13(12):3425–3428, August 2020. CODEN ???? ISSN 2150-8097.

Whang:2020:DCQ

[2464] Steven Euijong Whang and Jae-Gil Lee. Data collection and quality challenges for deep learning. *Proceedings of the VLDB Endowment*, 13(12):3429–3432, August 2020. CODEN ???? ISSN 2150-8097.

Burdick:2020:TEU

[2465] Douglas Burdick, Marina Danilevsky, Alexandre V Evfimievski, Yannis Katsis, and Nancy Wang. Table extraction and understanding for scientific and enterprise applications. *Proceedings of the VLDB Endowment*, 13(12):3433–3436, August 2020. CODEN ???? ISSN 2150-8097.

Qin:2020:SQP

[2466] Jianbin Qin, Wei Wang, Chuan Xiao, and Ying Zhang. Similarity query processing for high-dimensional data. *Proceedings of the VLDB Endowment*, 13 (12):3437–3440, August 2020. CODEN ???? ISSN 2150-8097.

Gupta:2020:BHT

[2467] Suyash Gupta, Jelle Hellings, Sajjad Rahnama, and Mohammad Sadoghi. Building high throughput permissioned blockchain fabrics: challenges and opportunities. *Proceedings of the VLDB Endowment*, 13(12):3441–3444, August 2020. CODEN ???? ISSN 2150-8097.

Asudeh:2020:FES

[2468] Abolfazl Asudeh and H. V. Jagadish. Fairly evaluating and scoring items in a data set. *Proceedings of the VLDB Endowment*, 13(12):3445–3448, August 2020. CODEN ???? ISSN 2150-8097.

Zhang:2020:SVD

[2469] Meihui Zhang, Zhongle Xie, Cong Yue, and Ziyue Zhong. Spitz: a verifiable database system. *Proceedings of the VLDB Endowment*, 13(12):3449–3460, August 2020. CODEN ???? ISSN 2150-8097.

Melnik:2020:DDI

[2470] Sergey Melnik, Andrey Gubarev, Jing Jing Long, Geoffrey Romer, Shiva Shivakumar, Matt Tolton, Theo Vassilakis, Hossein Ahmadi, Dan Delorey, Slava Min, Mosha Pasumansky, and Jeff Shute. Dremel: a decade of interactive SQL analysis at web scale. *Proceedings of the VLDB Endowment*, 13

(12):3461–3472, August 2020. CODEN ???? ISSN 2150-8097.

Ailamaki:2020:JWD

[2471] Anastasia Ailamaki. JIT works: decide when all data is known (VLDB women in database research award talk). *Proceedings of the VLDB Endowment*, 13 (12):3473, August 2020. CODEN ???? ISSN 2150-8097.

Stoyanovich:2020:RDM

[2472] Julia Stoyanovich, Bill Howe, and H. V. Jagadish. Responsible data management. *Proceedings of the VLDB Endowment*, 13(12):3474–3488, August 2020. CODEN ???? ISSN 2150-8097.

Goda:2020:OED

[2473] Kazuo Goda, Yuto Hayamizu, Hiroyuki Yamada, and Masaru Kitsuregawa. Out-of-order execution of database queries. *Proceedings of the VLDB Endowment*, 13(12):3489–3501, August 2020. CODEN ???? ISSN 2150-8097.

Olteanu:2020:RDB

[2474] Dan Olteanu. The relational data borg is learning. *Proceedings of the VLDB Endowment*, 13(12):3502–3515, August 2020. CODEN ???? ISSN 2150-8097.

Bailis:2020:WSD

[2475] Peter Bailis, Juliana Freire, Magda Balazinska, Raghu Ramakrishnan, Joseph M. Hellerstein, Xin Luna Dong, and Michael Stonebraker. Winds from Seattle: database research directions. *Proceedings of the VLDB Endowment*, 13(12):3516, August 2020. CODEN ???? ISSN 2150-8097.

Zeng:2020:SBI

[2476] Yuxiang Zeng, Yongxin Tong, Yuguang Song, and Lei Chen. The simpler the better: an indexing approach for shared-route planning queries. *Proceedings of the VLDB Endowment*, 13(13): 3517–3530, September 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3424573.3424574`.

Tanabe:2020:ACC

[2477] Takayuki Tanabe, Takashi Hoshino, Hideyuki Kawashima, and Osamu Tatebe. An analysis of concurrency control protocols for in-memory databases with CCBench. *Proceedings of the VLDB Endowment*, 13(13): 3531–3544, September 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3424573.3424575`.

Wang:2020:IUS

[2478] Tianhao Wang, Bolin Ding, Min Xu, Zhicong Huang, Cheng Hong, Jingren Zhou, Ninghui Li, and Somesh Jha. Improving utility and security of the shuffler-based differential privacy. *Proceedings of the VLDB Endowment*, 13(13):3545–3558, September 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3424573.3424576`.

Kipf:2020:CIL

[2479] Andreas Kipf, Damian Chromejko, Alexander Hall, Peter Boncz, and David G. Andersen. Cuckoo index: a lightweight secondary index structure. *Proceedings of the VLDB Endowment*, 13(13):3559–3572, September 2020. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3424573.3424577.

Abebe:2020:MAP

[2480] Michael Abebe, Brad Glasbergen, and Khuzaima Daudjee. MorphoSys: automatic physical design metamorphosis for distributed database systems. *Proceedings of the VLDB Endowment*, 13(13):3573–3587, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3424573.3424578.

Behnezhad:2020:PGA

[2481] Soheil Behnezhad, Laxman Dhulipala, Hossein Esfandiari, Jakub Lacki, Vahab Mirrokni, and Warren Schudy. Parallel graph algorithms in constant adaptive rounds: theory meets practice. *Proceedings of the VLDB Endowment*, 13(13):3588–3602, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3424573.3424579.

Wang:2020:DLP

[2482] Runhui Wang and Dong Deng. DeltaPQ: lossless product quantization code compression for high dimensional similarity search. *Proceedings of the VLDB Endowment*, 13(13):3603–3616, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3424573.3424580.

Marcus:2020:BLI

[2483] Ryan Marcus, Andreas Kipf, Alexander van Renen, Mihail Stoian, Sanchit Misra, Alfons Kemper, Thomas Neumann, and Tim Kraska. Benchmarking learned indexes. *Proceedings of the VLDB Endowment*, 14 (1):1–13, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3421424.3421425.

Wang:2020:TGC

[2484] Zuozhi Wang, Kai Zeng, Botong Huang, Wei Chen, Xiaozong Cui, Bo Wang, Ji Liu, Liya Fan, Dachuan Qu, Zhenyu Hou, Tao Guan, Chen Li, and Jingren Zhou. Tempura: a general cost-based optimizer framework for incremental data processing. *Proceedings of the VLDB Endowment*, 14 (1):14–27, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3421424.3421427.

Heo:2020:IGD

[2485] Geon Heo, Yuji Roh, Seonghyeon Hwang, Dayun Lee, and Steven Euijong Whang. Inspector gadget: a data programming-based labeling system for industrial images. *Proceedings of the VLDB Endowment*, 14 (1):28–36, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3421424.3421429.

Yang:2020:SAN

[2486] Renchi Yang, Jieming Shi, Xiaokui Xiao, Yin Yang, Juncheng Liu, and Sourav S. Bhowmick. Scaling attributed network embedding to massive graphs. *Proceedings of the VLDB Endowment*, 14(1):37–49, September 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3421424.3421430.

Li:2020:DEM

[2487] Yuliang Li, Jinfeng Li, Yoshihiko Suhara, AnHai Doan, and Wang-Chiew Tan. Deep entity matching with pre-trained language models. *Proceedings of the VLDB Endowment*, 14 (1):50–60, September 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3421424.3421431`.

Yang:2020:NOC

[2488] Zongheng Yang, Amog Kamsetty, Sifei Luan, Eric Liang, Yan Duan, Xi Chen, and Ion Stoica. NeuroCard: one cardinality estimator for all tables. *Proceedings of the VLDB Endowment*, 14 (1):61–73, September 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3421424.3421432`.

Ding:2020:TLM

[2489] Jialin Ding, Vikram Nathan, Mohammad Alizadeh, and Tim Kraska. Tsunami: a learned multi-dimensional index for correlated data and skewed workloads. *Proceedings of the VLDB Endowment*, 14(2):74–86, October 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3425879.3425880`.

Kang:2020:JOP

[2490] Daniel Kang, Ankit Mathur, Teja Veeramacheneni, Peter Bailis, and Matei Zaharia. Jointly optimizing preprocessing and inference for DNN-based visual analytics. *Proceedings of the VLDB Endowment*, 14(2):87–100, October 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3425879.3425881`.

Menon:2020:PCQ

[2491] Prashanth Menon, Amadou Ngom, Lin Ma, Todd C. Mowry, and Andrew Pavlo. Permutable compiled queries: dynamically adapting compiled queries without recompiling. *Proceedings of the VLDB Endowment*, 14(2):101–113, October 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3425879.3425882`.

Min:2020:EEM

[2492] Seung Won Min, Vikram Sharma Mailthody, Zaid Qureshi, Jinjun Xiong, Eiman Ebrahimi, and Wen mei Hwu. EMOGI: efficient memory-access for out-of-memory graph-traversal in GPUs. *Proceedings of the VLDB Endowment*, 14(2):114–127, October 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3425879.3425883`.

Zhang:2020:SFA

[2493] Yinda Zhang, Jinyang Li, Yutian Lei, Tong Yang, Zhetao Li, Gong Zhang, and Bin Cui. On-off sketch: a fast and accurate sketch on persistence. *Proceedings of the VLDB Endowment*, 14(2):128–140, October 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3425879.3425884`.

Tran:2020:RTD

[2494] Luan Tran, Min Y. Mun, and Cyrus Shahabi. Real-time distance-based outlier detection in data streams. *Proceedings of the VLDB Endowment*, 14 (2):141–153, October 2020. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425885.

Poppe:2020:SIL

[2495] Olga Poppe, Tayo Amuneke, Dalitso Banda, Aritra De, Ari Green, Manon Knoertzer, Ehi Nosakhare, Karthik Rajendran, Deepak Shankargouda, Meina Wang, Alan Au, Carlo Curino, Qun Guo, Alekh Jindal, Ajay Kalhan, Morgan Oslake, Sonia Parchani, Vijay Ramani, Raj Sellappan, Saikat Sen, Sheetal Shrotri, Soundararajan Srinivasan, Ping Xia, Shize Xu, Alicia Yang, and Yiwen Zhu. Seagull: an infrastructure for load prediction and optimized resource allocation. *Proceedings of the VLDB Endowment*, 14(2):154–162, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425886.

Wang:2020:EKM

[2496] Sheng Wang, Yuan Sun, and Zhifeng Bao. On the efficiency of K-means clustering: evaluation, optimization, and algorithm selection. *Proceedings of the VLDB Endowment*, 14(2):163–175, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425887.

Sun:2020:RHA

[2497] Shixuan Sun, Xibo Sun, Yulin Che, Qiong Luo, and Bingsheng He. RapidMatch: a holistic approach to subgraph query processing. *Proceedings of the VLDB Endowment*, 14(2):176–188, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425888.

Xia:2020:TLP

[2498] Yu Xia, Xiangyao Yu, Andrew Pavlo, and Srinivas Devadas. Taurus: lightweight parallel logging for in-memory database management systems. *Proceedings of the VLDB Endowment*, 14(2):189–201, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425889.

Paul:2020:IEE

[2499] Johns Paul, Bingsheng He, Shengliang Lu, and Chiew Tong Lau. Improving execution efficiency of just-in-time compilation based query processing on GPUs. *Proceedings of the VLDB Endowment*, 14(2):202–214, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425890.

Wang:2020:PTS

[2500] Shuang Wang and Hakan Ferhatosmanoglu. PPQ-trajectory: spatio-temporal quantization for querying in large trajectory repositories. *Proceedings of the VLDB Endowment*, 14(2):215–227, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425891.

Hu:2020:ADP

[2501] Xiao Hu, Shouzhuo Sun, Shweta Patwa, Debmalya Panigrahi, and Sudeepa Roy. Aggregated deletion propagation for counting conjunctive query answers. *Proceedings of the VLDB Endowment*, 14(2):228–240, October 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3425879.3425892.

Luo:2020:BMW

[2502] Chen Luo and Michael J. Carey. Breaking down memory walls: adaptive memory management in LSM-based storage systems. *Proceedings of the VLDB Endowment*, 14(3):241–254, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442425.

Karlas:2020:NNC

[2503] Bojan Karlas, Peng Li, Renzhi Wu, Nezihe Merve Gürel, Xu Chu, Wentao Wu, and Ce Zhang. Nearest neighbor classifiers over incomplete information: from certain answers to certain predictions. *Proceedings of the VLDB Endowment*, 14(3):255–267, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442426.

Kingsbury:2020:EII

[2504] Kyle Kingsbury and Peter Alvaro. Elle: inferring isolation anomalies from experimental observations. *Proceedings of the VLDB Endowment*, 14(3):268–280, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442427.

Kiefer:2020:SGF

[2505] Martin Kiefer, Ilias Poulakis, Sebastian Breß, and Volker Markl. Scotch: generating FPGA-accelerators for sketching at line rate. *Proceedings of the VLDB Endowment*, 14(3):281–293, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442428.

Khayati:2020:OOR

[2506] Mourad Khayati, Ines Arous, Zakhar Tymchenko, and Philippe Cudré-Mauroux. ORBITS: online recovery of missing values in multiple time series streams. *Proceedings of the VLDB Endowment*, 14(3):294–306, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442429.

Deng:2020:TTU

[2507] Xiang Deng, Huan Sun, Alyssa Lees, You Wu, and Cong Yu. TURL: table understanding through representation learning. *Proceedings of the VLDB Endowment*, 14(3):307–319, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442430.

Guo:2020:EUD

[2508] Long Guo, Lifeng Hua, Rongfei Jia, Fei Fang, Binqiang Zhao, and Bin Cui. EdgeDIPN: a unified deep intent prediction network deployed at the edge. *Proceedings of the VLDB Endowment*, 14(3):320–328, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442431.

Lin:2020:LCW

[2509] Yiming Lin, Daokun Jiang, Roberto Yus, Georgios Bouloukakis, Andrew Chio, Sharad Mehrotra, and Nalini Venkatasubramanian. Locater: cleaning wifi connectivity datasets for semantic localization. *Proceedings of the VLDB Endowment*, 14(3):329–341, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442432.

Liu:2020:MMT

[2510] Hao Liu, Jindong Han, Yanjie Fu, Jingbo Zhou, Xinjiang Lu, and Hui Xiong. Multi-modal transportation recommendation with unified route representation learning. *Proceedings of the VLDB Endowment*, 14(3):342–350, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442433`.

Wang:2020:DDF

[2511] Yue Wang, Ruiqi Xu, Zonghao Feng, Yulin Che, Lei Chen, Qiong Luo, and Rui Mao. Disk: a distributed framework for single-source SimRank with accuracy guarantee. *Proceedings of the VLDB Endowment*, 14(3):351–363, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442434`.

Didona:2020:TBU

[2512] Diego Didona, Nikolas Ioannou, Radu Stoica, and Kornilios Kourtis. Toward a better understanding and evaluation of tree structures on flash SSDs. *Proceedings of the VLDB Endowment*, 14(3):364–377, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442435`.

Yang:2020:AMD

[2513] Jianyu Yang, Tianhao Wang, Ninghui Li, Xiang Cheng, and Sen Su. Answering multi-dimensional range queries under local differential privacy. *Proceedings of the VLDB Endowment*, 14(3):378–390, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442436`.

Palyvos-Giannas:2020:ASF

[2514] Dimitris Palyvos-Giannas, Bastian Havers, Marina Papatriantafilou, and Vincenzo Gulisano. Ananke: a streaming framework for live forward provenance. *Proceedings of the VLDB Endowment*, 14(3):391–403, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442437`.

Lakhotia:2020:RRC

[2515] Kartik Lakhotia, Rajgopal Kannan, Viktor Prasanna, and Cesar A. F. De Rose. Receipt: refine coarse-grained independent tasks for parallel tip decomposition of bipartite graphs. *Proceedings of the VLDB Endowment*, 14(3):404–417, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442438`.

Deep:2020:CEW

[2516] Shaleen Deep, Anja Gruenheid, Paraschos Koutris, Jeffrey Naughton, and Stratis Viglas. Comprehensive and efficient workload compression. *Proceedings of the VLDB Endowment*, 14(3):418–430, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442439`.

He:2020:CCO

[2517] Yongjun He, Jiacheng Lu, and Tianzheng Wang. CoroBase: coroutine-oriented main-memory database engine. *Proceedings of the VLDB Endowment*, 14(3):431–444, November 2020. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.5555/3430915.3442440`.

Smith:2020:SQN

[2518] Jaclyn Smith, Michael Benedikt, Milos Nikolic, and Amir Shaikhha. Scalable querying of nested data. *Proceedings of the VLDB Endowment*, 14(3):445–457, November 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.5555/3430915.3442441.

Gong:2020:SCE

[2519] Long Gong, Ziheng Liu, Liang Liu, Jun Xu, Mitsunori Ogihara, and Tong Yang. Space- and computationally-efficient set reconciliation via parity bitmap sketch (PBS). *Proceedings of the VLDB Endowment*, 14(4):458–470, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436906.

Shetiya:2020:AAS

[2520] Suraj Shetiya, Saravanan Thirumuruganathan, Nick Koudas, and Gautam Das. Astrid: accurate selectivity estimation for string predicates using deep learning. *Proceedings of the VLDB Endowment*, 14(4):471–484, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436907.

Zheng:2020:CTR

[2521] Nan Zheng and Zachary G. Ives. Compact, tamper-resistant archival of fine-grained provenance. *Proceedings of the VLDB Endowment*, 14(4):485–497, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436909.

Muller:2020:RDI

[2522] Ingo Müller, Ghislain Fourny, Stefan Irimescu, Can Berker Cikis, and Gustavo Alonso. Rumble: data independence for large messy data sets. *Proceedings of the VLDB Endowment*, 14(4):498–506, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436910.

Chapman:2020:CQF

[2523] Adriane Chapman, Paolo Missier, Giulia Simonelli, and Riccardo Torlone. Capturing and querying fine-grained provenance of preprocessing pipelines in data science. *Proceedings of the VLDB Endowment*, 14(4):507–520, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436911.

Farias:2020:LDD

[2524] Victor A. E. Farias, Felipe T. Brito, Cheryl Flynn, Javam C. Machado, Subhabrata Majumdar, and Divesh Srivastava. Local dampening: differential privacy for non-numeric queries via local sensitivity. *Proceedings of the VLDB Endowment*, 14(4):521–533, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436912.

Li:2020:MDS

[2525] Tianyu Li, Matthew Butrovich, Amadou Ngom, Wan Shen Lim, Wes McKinney, and Andrew Pavlo. Mainlining databases: supporting fast transactional workloads on universal columnar data file formats. *Proceedings of the VLDB Endowment*, 14(4):534–546, December 2020. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3436905.3436913.

Lu:2020:AEC

[2526] Shengliang Lu, Bingsheng He, Yuchen Li, and Hao Fu. Accelerating exact constrained shortest paths on GPUs. *Proceedings of the VLDB Endowment*, 14(4):547–559, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436914.

Mo:2020:TEW

[2527] Songsong Mo, Zhifeng Bao, Ping Zhang, and Zhiyong Peng. Towards an efficient weighted random walk domination. *Proceedings of the VLDB Endowment*, 14(4):560–572, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436915.

Guo:2020:SMM

[2528] Guimu Guo, Da Yan, M. Tamer Özsu, Zhe Jiang, and Jalal Khalil. Scalable mining of maximal quasi-cliques: an algorithm-system codesign approach. *Proceedings of the VLDB Endowment*, 14(4):573–585, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436916.

Kokoris-Kogias:2020:CPD

[2529] Eleftherios Kokoris-Kogias, Enis Ceyhun Alp, Linus Gasser, Philipp Jovanovic, Ewa Syta, and Bryan Ford. CALYPSO: private data management for decentralized ledgers. *Proceedings of the VLDB Endowment*, 14(4): 586–599, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436917.

Deeds:2020:SFL

[2530] Kyle Deeds, Brian Hentschel, and Stratos Idreos. Stacked filters: learning to filter by structure. *Proceedings of the VLDB Endowment*, 14(4):600–612, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436919.

Banerjee:2020:MSW

[2531] Prithu Banerjee, Wei Chen, and Laks V. S. Lakshmanan. Maximizing social welfare in a competitive diffusion model. *Proceedings of the VLDB Endowment*, 14(4):613–625, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436920.

Gugnani:2020:UIR

[2532] Shashank Gugnani, Arjun Kashyap, and Xiaoyi Lu. Understanding the idiosyncrasies of real persistent memory. *Proceedings of the VLDB Endowment*, 14(4):626–639, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436921.

Gale:2020:EMR

[2533] Abraham Gale and Amélie Marian. Explaining monotonic ranking functions. *Proceedings of the VLDB Endowment*, 14(4):640–652, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436922.

Dhulipala:2020:CFS

[2534] Laxman Dhulipala, Changwan Hong, and Julian Shun. ConnectIt: a framework for static and incremental parallel graph connectivity algorithms. *Proceedings of the VLDB Endowment*, 14(4):653–667, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436923.

Kouadri:2020:QSA

[2535] Wissam Mammar Kouadri, Mourad Ouziri, Salima Benbernou, Karima Echihabi, Themis Palpanas, and Iheb Ben Amor. Quality of sentiment analysis tools: the reasons of inconsistency. *Proceedings of the VLDB Endowment*, 14(4):668–681, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436924.

Garcia:2020:HLM

[2536] Rolando Garcia, Eric Liu, Vikram Sreekanti, Bobby Yan, Anusha Dandamudi, Joseph E. Gonzalez, Joseph M. Hellerstein, and Koushik Sen. Hindsight logging for model training. *Proceedings of the VLDB Endowment*, 14 (4):682–693, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436925.

Jiang:2020:SSI

[2537] Lin Jiang, Junqiao Qiu, and Zhijia Zhao. Scalable structural index construction for JSON analytics. *Proceedings of the VLDB Endowment*, 14(4):694–707, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436926.

Rui:2020:EJA

[2538] Ran Rui, Hao Li, and Yi-Cheng Tu. Efficient join algorithms for large database tables in a multi-GPU environment. *Proceedings of the VLDB Endowment*, 14(4):708–720, December 2020. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3436905.3436927.

Yan:2021:FAP

[2539] Shuyuan Yan, Bolin Ding, Wei Guo, Jingren Zhou, Zhewei Wei, Xiaowei Jiang, and Sheng Xu. FlashP: an analytical pipeline for real-time forecasting of time-series relational data. *Proceedings of the VLDB Endowment*, 14(5):721–729, January 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3446095.3446096.

Duong:2021:ESS

[2540] Chi Thang Duong, Trung Dung Hoang, Hongzhi Yin, Matthias Weidlich, Quoc Viet Hung Nguyen, and Karl Aberer. Efficient streaming subgraph isomorphism with graph neural networks. *Proceedings of the VLDB Endowment*, 14(5):730–742, January 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3446095.3446097.

Lu:2021:EBC

[2541] Yi Lu, Xiangyao Yu, Lei Cao, and Samuel Madden. Epoch-based commit and replication in distributed OLTP databases. *Proceedings of the VLDB Endowment*, 14(5):743–756, January 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3446095.3446098.

Lin:2021:HCM

[2542] Zhe Lin, Fan Zhang, Xuemin Lin, Wenjie Zhang, and Zhihong Tian. Hierarchical core maintenance on large dynamic graphs. *Proceedings of the VLDB Endowment*, 14(5):757–770, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446099`.

Mohan:2021:AMD

[2543] Jayashree Mohan, Amar Phanishayee, Ashish Raniwala, and Vijay Chidambaram. Analyzing and mitigating data stalls in DNN training. *Proceedings of the VLDB Endowment*, 14(5):771–784, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446100`.

Hu:2021:PMH

[2544] Daokun Hu, Zhiwen Chen, Jianbing Wu, Jianhua Sun, and Hao Chen. Persistent memory hash indexes: an experimental evaluation. *Proceedings of the VLDB Endowment*, 14(5):785–798, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446101`.

Chen:2021:OMD

[2545] Cheng Chen, Jun Yang, Mian Lu, Taize Wang, Zhao Zheng, Yuqiang Chen, Wenyuan Dai, Bingsheng He, Weng-Fai Wong, Guoan Wu, Yuping Zhao, and Andy Rudoff. Optimizing in-memory database engine for AI-powered on-line decision augmentation using persistent memory. *Proceedings of the VLDB Endowment*, 14(5):799–812, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446102`.

Usta:2021:DMT

[2546] Arif Usta, Akifhan Karakayali, and Özgür Ulusoy. DBTagger: multi-task learning for keyword mapping in NLIDBs using bi-directional recurrent neural networks. *Proceedings of the VLDB Endowment*, 14(5):813–821, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446103`.

Sarkhel:2021:IIE

[2547] Ritesh Sarkhel and Arnab Nandi. Improving information extraction from visually rich documents using visual span representations. *Proceedings of the VLDB Endowment*, 14(5):822–834, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446104`.

Liu:2021:ZHT

[2548] Gang Liu, Leying Chen, and Shimin Chen. Zen: a high-throughput log-free OLTP engine for non-volatile main memory. *Proceedings of the VLDB Endowment*, 14(5):835–848, January 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3446095.3446105`.

Ji:2021:DPB

[2549] Tianxi Ji, Pan Li, Emre Yilmaz, Erman Ayday, Yanfang (Fanny) Ye, and Jinyuan Sun. Differentially private binary- and matrix-valued data query: an XOR mechanism. *Proceedings of the VLDB Endowment*, 14

(5):849–862, January 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3446095.3446106.

Nakandala:2021:ECD

[2550] Supun Nakandala, Yuhao Zhang, and Arun Kumar. Errata for “Cerebro: a data system for optimized deep learning model selection”. *Proceedings of the VLDB Endowment*, 14(6):863, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447691. See [2417].

Yin:2021:PBD

[2551] Lujia Yin, Yiming Zhang, Zhaoning Zhang, Yuxing Peng, and Peng Zhao. ParaX: boosting deep learning for big data analytics on many-core CPUs. *Proceedings of the VLDB Endowment*, 14(6):864–877, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447692.

Cai:2021:OTF

[2552] Walter Cai, Philip A. Bernstein, Wentao Wu, and Badrish Chandramouli. Optimization of threshold functions over streams. *Proceedings of the VLDB Endowment*, 14(6):878–889, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447693.

Zhu:2021:BCI

[2553] Xuliang Zhu, Xin Huang, Byron Choi, Jiaxin Jiang, Zhaonian Zou, and Jianliang Xu. Budget constrained interactive search for multiple targets. *Proceedings of the VLDB Endowment*, 14(6):890–902, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447694.

Chen:2021:SMK

[2554] Yangjun Chen and Hoang Hai Nguyen. On the string matching with k differences in DNA databases. *Proceedings of the VLDB Endowment*, 14(6):903–915, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447695.

Fujiwara:2021:FAA

[2555] Yasuhiro Fujiwara, Sekitoshi Kanai, Yasutoshi Ida, Atsutoshi Kumagai, and Naonori Ueda. Fast algorithm for anchor graph hashing. *Proceedings of the VLDB Endowment*, 14(6):916–928, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447696.

Zhang:2021:ACG

[2556] Wangda Zhang, Junyoung Kim, Kenneth A. Ross, Eric Sedlar, and Lukas Stadler. Adaptive code generation for data-intensive analytics. *Proceedings of the VLDB Endowment*, 14(6):929–942, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447697.

Tsamoura:2021:MKB

[2557] Efthymia Tsamoura, David Carral, Enrico Malizia, and Jacopo Urbani. Materializing knowledge bases via trigger graphs. *Proceedings of the VLDB Endowment*, 14(6):943–956, February

2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447699`.

Liu:2021:DEE

[2558] Jinfei Liu, Jian Lou, Junxu Liu, Li Xiong, Jian Pei, and Jimeng Sun. Dealer: an end-to-end model marketplace with differential privacy. *Proceedings of the VLDB Endowment*, 14 (6):957–969, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447700`.

Rahman:2021:NIS

[2559] Sajjadur Rahman, Mangesh Bendre, Yuyang Liu, Shichu Zhu, Zhaoyuan Su, Karrie Karahalios, and Aditya G. Parameswaran. NOAH: interactive spreadsheet exploration with dynamic hierarchical overviews. *Proceedings of the VLDB Endowment*, 14(6):970–983, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447701`.

Yang:2021:EBT

[2560] Yixing Yang, Yixiang Fang, Maria E. Orlowska, Wenjie Zhang, and Xuemin Lin. Efficient bi-triangle counting for large bipartite networks. *Proceedings of the VLDB Endowment*, 14(6): 984–996, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447702`.

Tata:2021:GSE

[2561] Sandeep Tata, Navneet Potti, James B. Wendt, Lauro Beltrão Costa, Marc Najork, and Beliz Gunel. Glean: structured extractions from templatic documents. *Proceedings of the VLDB Endowment*, 14(6):997–1005, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447703`.

Gao:2021:IGL

[2562] Jun Gao, Jiazun Chen, Zhao Li, and Ji Zhang. ICS-GNN: lightweight interactive community search via graph neural network. *Proceedings of the VLDB Endowment*, 14(6):1006–1018, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447704`.

Sun:2021:BEN

[2563] Yuanyuan Sun, Sheng Wang, Huorong Li, and Feifei Li. Building enclave-native storage engines for practical encrypted databases. *Proceedings of the VLDB Endowment*, 14(6):1019–1032, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447705`.

Thorne:2021:NLP

[2564] James Thorne, Majid Yazdani, Marzieh Saeidi, Fabrizio Silvestri, Sebastian Riedel, and Alon Halevy. From natural language processing to neural databases. *Proceedings of the VLDB Endowment*, 14(6):1033–1039, February 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3447689.3447706`.

Wang:2021:RER

[2565] Haibo Wang, Chaoyi Ma, Olufemi O. Odegbile, Shigang Chen, and Jih-Kwon Peir. Randomized error removal for online spread estimation in data streaming. *Proceedings of the VLDB En-*

dowment, 14(6):1040–1052, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447707.

DeLeo:2021:TAS

[2566] Dean De Leo and Peter Boncz. Teseo and the analysis of structural dynamic graphs. *Proceedings of the VLDB Endowment*, 14(6):1053–1066, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447708. See errata [2663].

Gubner:2021:CDS

[2567] Tim Gubner and Peter Boncz. Charting the design space of query execution using VOILA. *Proceedings of the VLDB Endowment*, 14(6):1067–1079, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447709.

Wang:2021:HES

[2568] Zhiqi Wang, Jin Xue, and Zili Shao. Heracles: an efficient storage model and data flushing for performance monitoring timeseries. *Proceedings of the VLDB Endowment*, 14(6):1080–1092, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447710.

Macke:2021:FGL

[2569] Stephen Macke, Hongpu Gong, Doris Jung-Lin Lee, Andrew Head, Doris Xin, and Aditya Parameswaran. Fine-grained lineage for safer notebook interactions. *Proceedings of the VLDB Endowment*, 14(6):1093–1101, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447712.

Tsitsulin:2021:FAG

[2570] Anton Tsitsulin, Marina Munkhoeva, Davide Mottin, Panagiotis Karras, Ivan Oseledets, and Emmanuel Müller. FREDE: anytime graph embeddings. *Proceedings of the VLDB Endowment*, 14(6):1102–1110, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447713.

Li:2021:AGM

[2571] Xiaodong Li, Reynold Cheng, Kevin Chen-Chuan Chang, Caihua Shan, Chenhao Ma, and Hongtai Cao. On analyzing graphs with motif-paths. *Proceedings of the VLDB Endowment*, 14 (6):1111–1123, February 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3447689.3447714.

Tsaras:2021:CIM

[2572] Dimitris Tsaras, George Trimponias, Lefteris Ntaflos, and Dimitris Papadias. Collective influence maximization for multiple competing products with an awareness-to-influence model. *Proceedings of the VLDB Endowment*, 14(7):1124–1136, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450981.

Sun:2021:FGS

[2573] Yahui Sun, Xiaokui Xiao, Bin Cui, Saman Halgamuge, Theodoros Lappas, and Jun Luo. Finding group Steiner trees in graphs with both vertex and edge weights. *Proceedings of the VLDB Endowment*, 14(7):1137–1149, March

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450982.

Abeywickrama:2021:OBM

[2574] Tenindra Abeywickrama, Victor Liang, and Kian-Lee Tan. Optimizing bipartite matching in real-world applications by incremental cost computation. *Proceedings of the VLDB Endowment*, 14(7):1150–1158, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450983.

Trummer:2021:CNE

[2575] Immanuel Trummer. The case for NLP-enhanced database tuning: towards tuning tools that "read the manual". *Proceedings of the VLDB Endowment*, 14(7):1159–1165, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450984.

Maiyya:2021:EUC

[2576] Sujaya Maiyya, Faisal Nawab, Divyakant Agrawal, and Amr El Abbadi. Errata for "Unifying consensus and atomic commitment for effective cloud data management". *Proceedings of the VLDB Endowment*, 14(7):1166, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450985. See [2086].

Istvan:2021:SDD

[2577] Zsolt István, Soujanya Ponnapalli, and Vijay Chidambaram. Software-defined data protection: low overhead policy compliance at the storage layer is within reach! *Proceedings of the VLDB Endowment*, 14(7):1167–1174, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450986.

Li:2021:TRT

[2578] Tianyi Li, Lu Chen, Christian S. Jensen, and Torben Bach Pedersen. TRACE: real-time compression of streaming trajectories in road networks. *Proceedings of the VLDB Endowment*, 14(7):1175–1187, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450987.

Saha:2021:SPC

[2579] Arkaprava Saha, Ruben Brokkelkamp, Yllka Velaj, Arijit Khan, and Francesco Bonchi. Shortest paths and centrality in uncertain networks. *Proceedings of the VLDB Endowment*, 14(7):1188–1201, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450988.

Liu:2021:ADAa

[2580] Tongyu Liu, Ju Fan, Yinqing Luo, Nan Tang, Guoliang Li, and Xiaoyong Du. Adaptive data augmentation for supervised learning over missing data. *Proceedings of the VLDB Endowment*, 14(7):1202–1214, March 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3450980.3450989.

Zhao:2021:KPA

[2581] Fuheng Zhao, Sujaya Maiyya, Ryan Wiener, Divyakant Agrawal, and Amr El Abbadi. KLL$^{\pm}$ approximate quantile sketches over dynamic datasets. *Proceedings of the VLDB Endowment*, 14(7):1215–1227, March 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3450980.3450990`.

Jankov:2021:DNM

[2582] Dimitrije Jankov, Binhang Yuan, Shangyu Luo, and Chris Jermaine. Distributed numerical and machine learning computations via two-phase execution of aggregated join trees. *Proceedings of the VLDB Endowment*, 14 (7):1228–1240, March 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3450980.3450991`.

VanAken:2021:IML

[2583] Dana Van Aken, Dongsheng Yang, Sebastien Brillard, Ari Fiorino, Bohan Zhang, Christian Bilien, and Andrew Pavlo. An inquiry into machine learning-based automatic configuration tuning services on real-world database management systems. *Proceedings of the VLDB Endowment*, 14 (7):1241–1253, March 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3450980.3450992`.

Tang:2021:RRP

[2584] Nan Tang, Ju Fan, Fangyi Li, Jianhong Tu, Xiaoyong Du, Guoliang Li, Sam Madden, and Mourad Ouzzani. RPT: relational pre-trained transformer is almost all you need towards democratizing data preparation. *Proceedings of the VLDB Endowment*, 14(8):1254–1261, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457391`.

Zou:2021:LAP

[2585] Jia Zou, Amitabh Das, Pratik Barhate, Arun Iyengar, Binhang Yuan, Dimitrije Jankov, and Chris Jermaine. Lachesis: automatic partitioning for UDF-centric analytics. *Proceedings of the VLDB Endowment*, 14(8):1262–1275, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457392`.

Wu:2021:ULI

[2586] Jiacheng Wu, Yong Zhang, Shimin Chen, Jin Wang, Yu Chen, and Chunxiao Xing. Updatable learned index with precise positions. *Proceedings of the VLDB Endowment*, 14(8):1276–1288, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457393`.

Fang:2021:MMS

[2587] Ziquan Fang, Lu Pan, Lu Chen, Yuntao Du, and Yunjun Gao. MDTP: a multi-source deep traffic prediction framework over spatio-temporal trajectory data. *Proceedings of the VLDB Endowment*, 14(8):1289–1297, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457394`.

Min:2021:SCS

[2588] Seunghwan Min, Sung Gwan Park, Kunsoo Park, Dora Giammarresi, Giuseppe F. Italiano, and Wook-Shin Han. Symmetric continuous subgraph matching with bidirectional dynamic programming. *Proceedings of the VLDB Endowment*, 14(8):1298–1310, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457395`.

Suzuki:2021:ADP

[2589] Tomoya Suzuki, Kazuhiro Hiwada, Hirotsugu Kajihara, Shintaro Sano, Shuou Nomura, and Tatsuo Shiozawa. Approaching DRAM performance by using microsecond-latency flash memory for small-sized random read accesses: a new access method and its graph applications. *Proceedings of the VLDB Endowment*, 14(8):1311–1324, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457397`.

Orogat:2021:CTB

[2590] Abdelghny Orogat, Isabelle Liu, and Ahmed El-Roby. CBench: towards better evaluation of question answering over knowledge graphs. *Proceedings of the VLDB Endowment*, 14 (8):1325–1337, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457398`.

Yuan:2021:TRA

[2591] Binhang Yuan, Dimitrije Jankov, Jia Zou, Yuxin Tang, Daniel Bourgeois, and Chris Jermaine. Tensor relational algebra for distributed machine learning system design. *Proceedings of the VLDB Endowment*, 14(8):1338–1350, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457399`.

Fan:2021:PDD

[2592] Wenfei Fan, Chao Tian, Yanghao Wang, and Qiang Yin. Parallel discrepancy detection and incremental detection. *Proceedings of the VLDB Endowment*, 14(8):1351–1364, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457400`.

Liu:2021:TCA

[2593] Tiantian Liu, Huan Li, Hua Lu, Muhammad Aamir Cheema, and Lidan Shou. Towards crowd-aware indoor path planning. *Proceedings of the VLDB Endowment*, 14(8):1365–1377, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457401`.

Gupta:2021:PES

[2594] Surabhi Gupta and Karthik Ramachandra. Procedural extensions of SQL: understanding their usage in the wild. *Proceedings of the VLDB Endowment*, 14(8):1378–1391, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457402`.

Bharadwaj:2021:DRD

[2595] Sagar Bharadwaj, Praveen Gupta, Ranjita Bhagwan, and Saikat Guha. Discovering related data at scale. *Proceedings of the VLDB Endowment*, 14 (8):1392–1400, April 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3457390.3457403`.

Cereda:2021:CCG

[2596] Stefano Cereda, Stefano Valladares, Paolo Cremonesi, and Stefano Doni. CGPTuner: a contextual Gaussian process bandit approach for the automatic tuning of IT configurations under varying workload conditions. *Proceedings of the VLDB Endowment*, 14 (8):1401–1413, April 2021. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3457390.3457404.

Schiavio:2021:LAI

[2597] Filippo Schiavio, Daniele Bonetta, and Walter Binder. Language-agnostic integrated queries in a managed polyglot runtime. *Proceedings of the VLDB Endowment*, 14(8):1414–1426, April 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3457390.3457405.

Kulkarni:2021:AHT

[2598] Chinmay Kulkarni, Badrish Chandramouli, and Ryan Stutsman. Achieving high throughput and elasticity in a larger-than-memory store. *Proceedings of the VLDB Endowment*, 14 (8):1427–1440, April 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3457390.3457406.

Yao:2021:ESB

[2599] Kai Yao and Lijun Chang. Efficient size-bounded community search over large networks. *Proceedings of the VLDB Endowment*, 14(8):1441–1453, April 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3457390.3457407.

Zhao:2021:MVA

[2600] Jianwen Zhao and Yufei Tao. Minimum vertex augmentation. *Proceedings of the VLDB Endowment*, 14 (9):1454–1466, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461536.

Gaffney:2021:DIS

[2601] Kevin P. Gaffney, Robert Claus, and Jignesh M. Patel. Database isolation by scheduling. *Proceedings of the VLDB Endowment*, 14(9):1467–1480, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461537.

Park:2021:SSS

[2602] Jong-Hyeok Park, Soyee Choi, Gihwan Oh, and Sang-Won Lee. SaS: SSD as SQL database system. *Proceedings of the VLDB Endowment*, 14 (9):1481–1488, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461538.

Zhu:2021:FFL

[2603] Rong Zhu, Ziniu Wu, Yuxing Han, Kai Zeng, Andreas Pfadler, Zhengping Qian, Jingren Zhou, and Bin Cui. FLAT: fast, lightweight and accurate method for cardinality estimation. *Proceedings of the VLDB Endowment*, 14 (9):1489–1502, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461539.

Chan:2021:FAA

[2604] Tsz Nam Chan, Zhe Li, Leong Hou U., Jianliang Xu, and Reynold Cheng. Fast augmentation algorithms for network kernel density visualization. *Proceedings of the VLDB Endowment*, 14 (9):1503–1516, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461540.

Wang:2021:AAG

[2605] Jiawei Wang, Cheng Li, Kai Ma, Jingze Huo, Feng Yan, Xinyu Feng, and Yinlong Xu. AUTOGR: automated geo-replication with fast system performance and preserved application semantics. *Proceedings of the VLDB Endowment*, 14(9):1517–1530, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461541.

Liu:2021:LAD

[2606] Qing Liu, Xuliang Zhu, Xin Huang, and Jianliang Xu. Local algorithms for distance-generalized core decomposition over large dynamic graphs. *Proceedings of the VLDB Endowment*, 14 (9):1531–1543, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461542.

Benson:2021:VEH

[2607] Lawrence Benson, Hendrik Makait, and Tilmann Rabl. Viper: an efficient hybrid PMem-DRAM key-value store. *Proceedings of the VLDB Endowment*, 14(9):1544–1556, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461543.

Zeighami:2021:ESC

[2608] Sepanta Zeighami, Cyrus Shahabi, and John Krumm. Estimating spread of contact-based contagions in a population through sub-sampling. *Proceedings of the VLDB Endowment*, 14 (9):1557–1569, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461544.

Herodotou:2021:TTS

[2609] Herodotos Herodotou and Elena Kakoulli. Trident: task scheduling over tiered storage systems in big data platforms. *Proceedings of the VLDB Endowment*, 14(9):1570–1582, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461545.

Cong:2021:CCE

[2610] Zicun Cong, Lingyang Chu, Yu Yang, and Jian Pei. Comprehensible counterfactual explanation on Kolmogorov–Smirnov test. *Proceedings of the VLDB Endowment*, 14(9):1583–1596, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461546.

Zhou:2021:ALS

[2611] Hongkuan Zhou, Ajitesh Srivastava, Hanqing Zeng, Rajgopal Kannan, and Viktor Prasanna. Accelerating large scale real-time GNN inference using channel pruning. *Proceedings of the VLDB Endowment*, 14(9):1597–1605, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461547.

Leis:2021:TCO

[2612] Viktor Leis and Maximilian Kuschewski. Towards cost-optimal query processing in the cloud. *Proceedings of the VLDB Endowment*, 14(9):1606–1612, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461549.

Gong:2021:AIG

[2613] Shufeng Gong, Chao Tian, Qiang Yin, Wenyuan Yu, Yanfeng Zhang, Liang Geng, Song Yu, Ge Yu, and Jingren Zhou. Automating incremental graph processing with flexible memoization. *Proceedings of the VLDB Endowment*, 14(9):1613–1625, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461550.

Jepsen:2021:NST

[2614] Theo Jepsen, Alberto Lerner, Fernando Pedone, Robert Soulé, and Philippe Cudré-Mauroux. In-network support for transaction triaging. *Proceedings of the VLDB Endowment*, 14 (9):1626–1639, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461551.

Wang:2021:WRL

[2615] Xiaoying Wang, Changbo Qu, Weiyuan Wu, Jiannan Wang, and Qingqing Zhou. Are we ready for learned cardinality estimation? *Proceedings of the VLDB Endowment*, 14(9):1640–1654, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461552.

Lemiesz:2021:ADS

[2616] Jakub Lemiesz. On the algebra of data sketches. *Proceedings of the VLDB Endowment*, 14(9):1655–1667, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461553.

Hou:2021:MPA

[2617] Guanhao Hou, Xingguang Chen, Sibo Wang, and Zhewei Wei. Massively parallel algorithms for Personalized Pagerank. *Proceedings of the VLDB Endowment*, 14(9):1668–1680, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461554.

Schleich:2021:GQC

[2618] Maximilian Schleich, Zixuan Geng, Yihong Zhang, and Dan Suciu. GeCo: quality counterfactual explanations in real time. *Proceedings of the VLDB Endowment*, 14(9):1681–1693, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3461555.

Salazar:2021:AFE

[2619] Ricardo Salazar, Felix Neutatz, and Ziawasch Abedjan. Automated feature engineering for algorithmic fairness. *Proceedings of the VLDB Endowment*, 14(9):1694–1702, May 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3461535.3463474.

Addanki:2021:HDR

[2620] Raghavendra Addanki, Sainyam Galhotra, and Barna Saha. How to design robust algorithms using noisy comparison Oracle. *Proceedings of the VLDB Endowment*, 14(10):1703–1716, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467862.

Boniol:2021:SSS

[2621] Paul Boniol, John Paparrizos, Themis Palpanas, and Michael J. Franklin. SAND: streaming subsequence anomaly detection. *Proceedings of the VLDB Endowment*, 14(10):1717–1729, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467863.

Xiao:2021:OFU

[2622] Yingtai Xiao, Zeyu Ding, Yuxin Wang, Danfeng Zhang, and Daniel Kifer. Optimizing fitness-for-use of differentially private linear queries. *Proceedings of the VLDB Endowment*, 14 (10):1730–1742, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467864.

Cao:2021:CED

[2623] Xinle Cao, Jian Liu, Hao Lu, and Kui Ren. Cryptanalysis of an encrypted database in SIGMOD '14. *Proceedings of the VLDB Endowment*, 14 (10):1743–1755, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467865.

Jin:2021:USM

[2624] Tianyuan Jin, Yu Yang, Renchi Yang, Jieming Shi, Keke Huang, and Xiaokui Xiao. Unconstrained submodular maximization with modular costs: tight approximation and application to profit maximization. *Proceedings of the VLDB Endowment*, 14(10):1756–1768, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467866.

Zhang:2021:DDL

[2625] Yuhao Zhang, Frank McQuillan, Nandish Jayaram, Nikhil Kak, Ekta Khanna, Orhan Kislal, Domino Valdano, and Arun Kumar. Distributed deep learning on data systems: a comparative analysis of approaches. *Proceedings of the VLDB Endowment*, 14 (10):1769–1782, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467867.

Sheng:2021:PSM

[2626] Siyuan Sheng, Qun Huang, Sa Wang, and Yungang Bao. PR-sketch: monitoring per-key aggregation of streaming data with nearly full accuracy. *Proceedings of the VLDB Endowment*, 14 (10):1783–1796, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467868.

Koutsoukos:2021:TAG

[2627] Dimitrios Koutsoukos, Supun Nakandala, Konstantinos Karanasos, Karla Saur, Gustavo Alonso, and Matteo Interlandi. Tensors: an abstraction for general data processing. *Proceedings of the VLDB Endowment*, 14 (10):1797–1804, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467869.

Pujol:2021:BSM

[2628] David Pujol, Yikai Wu, Brandon Fain, and Ashwin Machanavajjhala. Budget sharing for multi-analyst differential privacy. *Proceedings of the VLDB Endowment*, 14(10):1805–1817, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467870.

Poepsel-Lemaitre:2021:LDS

[2629] Rudi Poepsel-Lemaitre, Martin Kiefer, Joscha von Hein, Jorge-Arnulfo Quiané-Ruiz, and Volker Markl. In the land of data streams where synopses are missing, one framework to bring them all. *Proceedings of the VLDB Endowment*, 14(10):1818–1831, June

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467871.

Li:2021:DAI

[2630] Yifan Li, Xiaohui Yu, and Nick Koudas. Data acquisition for improving machine learning models. *Proceedings of the VLDB Endowment*, 14 (10):1832–1844, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467872.

Chen:2021:EAR

[2631] Xiaoshuang Chen, Kai Wang, Xuemin Lin, Wenjie Zhang, Lu Qin, and Ying Zhang. Efficiently answering reachability and path queries on temporal bipartite graphs. *Proceedings of the VLDB Endowment*, 14(10):1845–1858, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467873.

Ciaccia:2021:PQT

[2632] Paolo Ciaccia, Davide Martinenghi, and Riccardo Torlone. Preference queries over taxonomic domains. *Proceedings of the VLDB Endowment*, 14 (10):1859–1871, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467874.

Yan:2021:RDL

[2633] Baoyue Yan, Xuntao Cheng, Bo Jiang, Shibin Chen, Canfang Shang, Jianying Wang, Gui Huang, Xinjun Yang, Wei Cao, and Feifei Li. Revisiting the design of LSM-tree based OLTP storage engine with persistent memory. *Proceedings of the VLDB Endowment*, 14(10):1872–1885, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467875.

Ge:2021:KCA

[2634] Chang Ge, Shubhankar Mohapatra, Xi He, and Ihab F. Ilyas. Kamino: constraint-aware differentially private data synthesis. *Proceedings of the VLDB Endowment*, 14(10):1886–1899, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467876.

Zhang:2021:TCE

[2635] Yingqiang Zhang, Chaoyi Ruan, Cheng Li, Xinjun Yang, Wei Cao, Feifei Li, Bo Wang, Jing Fang, Yuhui Wang, Jingze Huo, and Chao Bi. Towards cost-effective and elastic cloud database deployment via memory disaggregation. *Proceedings of the VLDB Endowment*, 14(10):1900–1912, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467877.

Peeters:2021:DOF

[2636] Ralph Peeters and Christian Bizer. Dual-objective fine-tuning of BERT for entity matching. *Proceedings of the VLDB Endowment*, 14(10):1913–1921, June 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3467861.3467878.

Besta:2021:GEH

[2637] Maciej Besta, Zur Vonarburg-Shmaria, Yannick Schaffner, Leonardo Schwarz, Grzegorz Kwasniewski, Lukas Gianinazzi, Jakub Beranek, Kacper Janda, Tobias Holenstein, Sebastian Leisinger, Peter Tatkowski, Esref Ozdemir, Adrian Balla, Marcin Copik, Philipp Lindenberger, Marek Konieczny, Onur Mutlu, and Torsten Hoefler. GraphMineSuite: enabling high-performance and programmable graph mining algorithms with set algebra. *Proceedings of the VLDB Endowment*, 14 (11):1922–1935, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476252.

Takenouchi:2021:PES

[2638] Keita Takenouchi, Takashi Ishio, Joji Okada, and Yuji Sakata. PATSQL: efficient synthesis of SQL queries from example tables with quick inference of projected columns. *Proceedings of the VLDB Endowment*, 14(11):1937–1949, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476253.

Liu:2021:FFA

[2639] Jie Liu, Wenqian Dong, Qingqing Zhou, and Dong Li. Fauce: fast and accurate deep ensembles with uncertainty for cardinality estimation. *Proceedings of the VLDB Endowment*, 14(11):1950–1963, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476254.

Wang:2021:CSE

[2640] Mengzhao Wang, Xiaoliang Xu, Qiang Yue, and Yuxiang Wang. A comprehensive survey and experimental comparison of graph-based approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 14(11):1964–1978, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476255.

Yuan:2021:TPP

[2641] Zifeng Yuan, Huey Eng Chua, Sourav S. Bhowmick, Zekun Ye, Wook-Shin Han, and Byron Choi. Towards plug-and-play visual graph query interfaces: data-driven selection of canned patterns for large networks. *Proceedings of the VLDB Endowment*, 14 (11):1979–1991, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476256.

Sun:2021:TMG

[2642] Shixuan Sun, Yuhang Chen, Shengliang Lu, Bingsheng He, and Yuchen Li. ThunderRW: an in-memory graph random walk engine. *Proceedings of the VLDB Endowment*, 14(11):1992–2005, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476257.

Dong:2021:BCC

[2643] Zheng Dong, Xin Huang, Guorui Yuan, Hengshu Zhu, and Hui Xiong. Butterfly-core community search over labeled graphs. *Proceedings of the VLDB Endowment*, 14(11):2006–2018, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476258.

Negi:2021:FLL

[2644] Parimarjan Negi, Ryan Marcus, Andreas Kipf, Hongzi Mao, Nesime Tatbul, Tim Kraska, and Mohammad Alizadeh. Flow-loss: learning cardinality estimates that matter. *Proceedings of the VLDB Endowment*, 14 (11):2019–2032, July 2021. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3476249.3476259.

Yu:2021:QHK

[2645] Michael Yu, Dong Wen, Lu Qin, Ying Zhang, Wenjie Zhang, and Xuemin Lin. On querying historical k-cores. *Proceedings of the VLDB Endowment*, 14(11):2033–2045, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476260.

Cormode:2021:FEU

[2646] Graham Cormode, Samuel Maddock, and Carsten Maple. Frequency estimation under local differential privacy. *Proceedings of the VLDB Endowment*, 14(11):2046–2058, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476261.

Zogaj:2021:DML

[2647] Fatjon Zogaj, José Pablo Cambronero, Martin C. Rinard, and Jürgen Cito. Doing more with less: characterizing dataset downsampling for AutoML. *Proceedings of the VLDB Endowment*, 14(11):2059–2072, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476262.

Li:2021:LBE

[2648] Yifan Li, Xiaohui Yu, and Nick Koudas. LES 3: learning-based exact set similarity search. *Proceedings of the VLDB Endowment*, 14(11):2073–2086, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476263.

Min:2021:LGC

[2649] Seung Won Min, Kun Wu, Sitao Huang, Mert Hidayetoglu, Jinjun Xiong, Eiman Ebrahimi, Deming Chen, and Wen mei Hwu. Large graph convolutional network training with GPU-oriented data communication architecture. *Proceedings of the VLDB Endowment*, 14(11):2087–2100, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476264.

Yang:2021:FHP

[2650] Yifei Yang, Matt Youill, Matthew Woicik, Yizhou Liu, Xiangyao Yu, Marco Serafini, Ashraf Aboulnaga, and Michael Stonebraker. FlexPushdownDB: hybrid pushdown and caching in a cloud DBMS. *Proceedings of the VLDB Endowment*, 14(11):2101–2113, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476265.

Chen:2021:AMA

[2651] Zhiwei Chen, Shaoxu Song, Ziheng Wei, Jingyun Fang, and Jiang Long. Approximating median absolute deviation with bounded error. *Proceedings of the VLDB Endowment*, 14(11):2114–2126, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476266.

Zhang:2021:EEG

[2652] Mengxuan Zhang, Lei Li, and Xiaofang Zhou. An experimental evaluation and guideline for path finding in weighted dynamic network. *Proceedings of the VLDB Endowment*, 14(11):2127–2140, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476267.

Vandevoort:2021:RAR

[2653] Brecht Vandevoort, Bas Ketsman, Christoph Koch, and Frank Neven. Robustness against read committed for transaction templates. *Proceedings of the VLDB Endowment*, 14 (11):2141–2153, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476268.

Zhang:2021:LLC

[2654] Huayi Zhang, Lei Cao, Samuel Madden, and Elke Rundensteiner. LANCET: labeling complex data at scale. *Proceedings of the VLDB Endowment*, 14(11):2154–2166, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476269.

Li:2021:VSE

[2655] Yang Li, Yu Shen, Wentao Zhang, Jiawei Jiang, Bolin Ding, Yaliang Li, Jingren Zhou, Zhi Yang, Wentao Wu, Ce Zhang, and Bin Cui. VolcanoML: speeding up end-to-end AutoML via scalable search space decomposition. *Proceedings of the VLDB Endowment*, 14(11):2167–2176, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476270.

Cheng:2021:QTF

[2656] Peng Cheng, Jiabao Jin, Lei Chen, Xuemin Lin, and Libin Zheng. A queueing-theoretic framework for vehicle dispatching in dynamic car-hailing. *Proceedings of the VLDB Endowment*, 14(11):2177–2189, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476271.

Cai:2021:DSD

[2657] Kuntai Cai, Xiaoyu Lei, Jianxin Wei, and Xiaokui Xiao. Data synthesis via differentially private Markov random fields. *Proceedings of the VLDB Endowment*, 14(11):2190–2202, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476272.

Whittaker:2021:SRS

[2658] Michael Whittaker, Ailidani Ailijiang, Aleksey Charapko, Murat Demirbas, Neil Giridharan, Joseph M. Hellerstein, Heidi Howard, Ion Stoica, and Adriana Szekeres. Scaling replicated state machines with compartmentalization. *Proceedings of the VLDB Endowment*, 14(11):2203–2215, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476273.

Sarkar:2021:CAL

[2659] Subhadeep Sarkar, Dimitris Staratzis, Ziehen Zhu, and Manos Athanassoulis. Constructing and analyzing the LSM compaction design space. *Proceedings of the VLDB Endowment*, 14 (11):2216–2229, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476274.

Hellings:2021:BSB

[2660] Jelle Hellings and Mohammad Sadoghi. ByShard: sharding in a Byzantine environment. *Proceedings of the VLDB Endowment*, 14(11):2230–2243, July

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476275.

Ertl:2021:SFG

[2661] Otmar Ertl. SetSketch: filling the gap between MinHash and HyperLogLog. *Proceedings of the VLDB Endowment*, 14(11):2244–2257, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476276.

Bao:2021:CEM

[2662] Ergute Bao, Yin Yang, Xiaokui Xiao, and Bolin Ding. CGM: an enhanced mechanism for streaming data collection with local differential privacy. *Proceedings of the VLDB Endowment*, 14(11):2258–2270, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476277.

Leo:2021:ETA

[2663] Dean De Leo, Per Fuchs, and Peter Boncz. Errata for "Teseo and the analysis of structural dynamic graphs": (PVLDB **14**(6):1053–1066). *Proceedings of the VLDB Endowment*, 14 (11):2271–2272, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476278. See [2566].

Musleh:2021:QMB

[2664] Mashaal Musleh, Sofiane Abbar, Rade Stanojevic, and Mohamed Mokbel. QARTA: an ML-based system for accurate map services. *Proceedings of the VLDB Endowment*, 14(11):2273–2282, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476279.

Cunningham:2021:RWT

[2665] Teddy Cunningham, Graham Cormode, Hakan Ferhatosmanoglu, and Divesh Srivastava. Real-world trajectory sharing with local differential privacy. *Proceedings of the VLDB Endowment*, 14(11):2283–2295, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476280.

Sinthong:2021:PRQ

[2666] Phanwadee Sinthong and Michael J. Carey. PolyFrame: a retargetable query-based approach to scaling dataframes. *Proceedings of the VLDB Endowment*, 14(11):2296–2304, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476281.

Shi:2021:SCD

[2667] Jessica Shi, Laxman Dhulipala, David Eisenstat, Jakub Lacki, and Vahab Mirrokni. Scalable community detection via parallel correlation clustering. *Proceedings of the VLDB Endowment*, 14(11):2305–2313, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476282.

Xu:2021:SSB

[2668] Cheng Xu, Ce Zhang, Jianliang Xu, and Jian Pei. SlimChain: scaling blockchain transactions through off-chain storage and parallel processing. *Proceedings of the VLDB Endowment*, 14(11):2314–2326, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476283.

Li:2021:TOG

[2669] Side Li and Arun Kumar. Towards an optimized GROUP by abstraction for large-scale machine learning. *Proceedings of the VLDB Endowment*, 14 (11):2327–2340, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476284.

Kang:2021:AAA

[2670] Daniel Kang, John Guibas, Peter Bailis, Tatsunori Hashimoto, Yi Sun, and Matei Zaharia. Accelerating approximate aggregation queries with expensive predicates. *Proceedings of the VLDB Endowment*, 14(11):2341–2354, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476285.

Schmidt:2021:FDA

[2671] Tobias Schmidt, Maximilian Bandle, and Jana Giceva. A four-dimensional analysis of partitioned approximate filters. *Proceedings of the VLDB Endowment*, 14(11):2355–2368, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476286.

Chiosa:2021:SOP

[2672] Monica Chiosa, Thomas B. Preußer, and Gustavo Alonso. SKT: a one-pass multi-sketch data analytics accelerator. *Proceedings of the VLDB Endowment*, 14(11):2369–2382, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476287.

Fent:2021:PAG

[2673] Philipp Fent and Thomas Neumann. A practical approach to groupjoin and nested aggregates. *Proceedings of the VLDB Endowment*, 14(11):2383–2396, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476288.

Wei:2021:RVQ

[2674] Ziyun Wei, Immanuel Trummer, and Connor Anderson. Robust voice querying with MUVE: optimally visualizing results of phonetically similar queries. *Proceedings of the VLDB Endowment*, 14(11):2397–2409, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476289.

Wu:2021:CCF

[2675] Yinjun Wu, James Weimer, and Susan B. Davidson. CHEF: a cheap and fast pipeline for iteratively cleaning label uncertainties. *Proceedings of the VLDB Endowment*, 14(11):2410–2418, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476290.

Siddiqui:2021:CAG

[2676] Tarique Siddiqui, Surajit Chaudhuri, and Vivek Narasayya. COMPARE: accelerating groupwise comparison in relational databases for data analytics. *Proceedings of the VLDB Endowment*, 14(11):2419–2431, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476291.

Durner:2021:CUC

[2677] Dominik Durner, Badrish Chandramouli, and Yinan Li. Crystal: a unified cache storage system for analytical databases. *Proceedings of the VLDB Endowment*, 14(11):2432–2444, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476292.

Cetorelli:2021:SEP

[2678] Valerio Cetorelli, Paolo Atzeni, Valter Crescenzi, and Franco Milicchio. The smallest extraction problem. *Proceedings of the VLDB Endowment*, 14 (11):2445–2458, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476293.

Thirumuruganathan:2021:DLB

[2679] Saravanan Thirumuruganathan, Han Li, Nan Tang, Mourad Ouzzani, Yash Govind, Derek Paulsen, Glenn Fung, and AnHai Doan. Deep learning for blocking in entity matching: a design space exploration. *Proceedings of the VLDB Endowment*, 14(11):2459–2472, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476294.

Zhang:2021:GID

[2680] Wentao Zhang, Zhi Yang, Yexin Wang, Yu Shen, Yang Li, Liang Wang, and Bin Cui. GRAIN: improving data efficiency of *gra*ph neural networks via diversified *in*fluence maximization. *Proceedings of the VLDB Endowment*, 14(11):2473–2482, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476295.

Bandle:2021:DTM

[2681] Maximilian Bandle and Jana Giceva. Database technology for the masses: sub-operators as first-class entities. *Proceedings of the VLDB Endowment*, 14(11):2483–2490, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476296.

Gupta:2021:CSL

[2682] Pranjal Gupta, Amine Mhedhbi, and Semih Salihoglu. Columnar storage and list-based processing for graph database management systems. *Proceedings of the VLDB Endowment*, 14 (11):2491–2504, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476297.

Zhu:2021:PLB

[2683] Yiwen Zhu, Matteo Interlandi, Abhishek Roy, Krishnadhan Das, Hiren Patel, Malay Bag, Hitesh Sharma, and Alekh Jindal. Phoebe: a learning-based checkpoint optimizer. *Proceedings of the VLDB Endowment*, 14 (11):2505–2518, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476298.

Nargesian:2021:TDS

[2684] Fatemeh Nargesian, Abolfazl Asudeh, and H. V. Jagadish. Tailoring data source distributions for fairness-aware data integration. *Proceedings of the VLDB Endowment*, 14(11):2519–2532, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476249.3476299.

Bansal:2021:MVI

[2685] Parikshit Bansal, Prathamesh Deshpande, and Sunita Sarawagi. Missing value imputation on multidimensional time series. *Proceedings of the VLDB Endowment*, 14(11):2533–2545, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476300`.

Rezig:2021:HSD

[2686] El Kindi Rezig, Mourad Ouzzani, Walid G. Aref, Ahmed K. Elmagarmid, Ahmed R. Mahmood, and Michael Stonebraker. Horizon: scalable dependency-driven data cleaning. *Proceedings of the VLDB Endowment*, 14(11):2546–2554, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476301`.

Shaowang:2021:DDS

[2687] Ted Shaowang, Nilesh Jain, Dennis D. Matthews, and Sanjay Krishnan. Declarative data serving: the future of machine learning inference on the edge. *Proceedings of the VLDB Endowment*, 14(11):2555–2562, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476302`.

Yang:2021:APS

[2688] Junwen Yang, Yeye He, and Surajit Chaudhuri. Auto-pipeline: synthesizing complex data pipelines by-target using reinforcement learning and search. *Proceedings of the VLDB Endowment*, 14(11):2563–2575, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476303`.

Lockhart:2021:EIQ

[2689] Brandon Lockhart, Jinglin Peng, Weiyuan Wu, Jiannan Wang, and Eugene Wu. Explaining inference queries with Bayesian optimization. *Proceedings of the VLDB Endowment*, 14 (11):2576–2585, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476304`.

Liu:2021:DBF

[2690] Chunwei Liu, Hao Jiang, John Paparrizos, and Aaron J. Elmore. Decomposed bounded floats for fast compression and queries. *Proceedings of the VLDB Endowment*, 14(11):2586–2598, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476305`.

Tziavelis:2021:BEJ

[2691] Nikolaos Tziavelis, Wolfgang Gatterbauer, and Mirek Riedewald. Beyond equi-joins: ranking, enumeration and factorization. *Proceedings of the VLDB Endowment*, 14(11):2599–2612, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476306`.

Jacob:2021:EBE

[2692] Vincent Jacob, Fei Song, Arnaud Stiegler, Bijan Rad, Yanlei Diao, and Nesime Tatbul. Exathlon: a benchmark for explainable anomaly detection over time series. *Proceedings of the VLDB Endowment*, 14(11):2613–2626, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476307`.

Kuchnik:2021:PCR

[2693] Michael Kuchnik, George Amvrosiadis, and Virginia Smith. Progressive compressed records: taking a byte out of deep learning data. *Proceedings of the VLDB Endowment*, 14(11):2627–2641, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476308`.

Alsaudi:2021:TFQ

[2694] Abdulrahman Alsaudi, Yasser Altowim, Sharad Mehrotra, and Yaming Yu. TQEL: framework for query-driven linking of top-k entities in social media blogs. *Proceedings of the VLDB Endowment*, 14(11):2642–2654, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476249.3476309`.

Chan:2021:KEN

[2695] Tsz Nam Chan, Pak Lon Ip, Leong Hou U., Weng Hou Tong, Shivansh Mittal, Ye Li, and Reynold Cheng. KDV-explorer: a near real-time kernel density visualization system for spatial analysis. *Proceedings of the VLDB Endowment*, 14(12):2655–2658, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476312`.

Zhang:2021:RRI

[2696] Zhebin Zhang, Dajie Dong, Yuhang Ma, Yilong Ying, Dawei Jiang, Ke Chen, Lidan Shou, and Gang Chen. Refiner: a reliable incentive-driven federated learning system powered by blockchain. *Proceedings of the VLDB Endowment*, 14(12):2659–2662, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476313`.

Uotila:2021:MMM

[2697] Valter Uotila, Jiaheng Lu, Dieter Gawlick, Zhen Hua Liu, Souripriya Das, and Gregory Pogossiants. MultiCategory: multi-model query processing meets category theory and functional programming. *Proceedings of the VLDB Endowment*, 14(12):2663–2666, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476314`.

Wang:2021:CCQ

[2698] Qichen Wang, Chaoqi Zhang, Danish Alsayed, Ke Yi, Bin Wu, Feifei Li, and Chaoqun Zhan. Cquirrel: continuous query processing over acyclic relational schemas. *Proceedings of the VLDB Endowment*, 14(12):2667–2670, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476315`.

Mao:2021:DDF

[2699] Yuetian Mao, Shuai Yuan, Nan Cui, Tianjiao Du, Beijun Shen, and Yuting Chen. DeFiHap: detecting and fixing HiveQL anti-patterns. *Proceedings of the VLDB Endowment*, 14 (12):2671–2674, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476316`.

Helal:2021:DKD

[2700] Ahmed Helal, Mossad Helali, Khaled Ammar, and Essam Mansour. A demonstration of KGLac: a data discovery and enrichment platform for data science. *Proceedings of the VLDB Endowment*, 14(12):2675–2678, July

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476317.

Faure-Giovagnoli:2021:AVL

[2701] Pierre Faure-Giovagnoli, Marie Le Guilly, Jean-Marc Petit, and Vasile-Marian Scuturici. ADESIT: visualize the limits of your data in a machine learning process. *Proceedings of the VLDB Endowment*, 14(12):2679–2682, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476318.

Yan:2021:PAM

[2702] Yinzhao Yan and Raymond Chi-Wing Wong. Path advisor: a multi-functional campus map tool for shortest path. *Proceedings of the VLDB Endowment*, 14(12):2683–2686, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476319.

Li:2021:IHL

[2703] Liangde Li, Supun Nakandala, and Arun Kumar. Intermittent human-in-the-loop model selection using Cerebro: a demonstration. *Proceedings of the VLDB Endowment*, 14(12):2687–2690, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476320.

Funke:2021:LLC

[2704] Henning Funke and Jens Teubner. Low-latency compilation of SQL queries to machine code. *Proceedings of the VLDB Endowment*, 14 (12):2691–2694, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476321.

Groppe:2021:SDS

[2705] Sven Groppe, Rico Klinckenberg, and Benjamin Warnke. Sound of databases: sonification of a semantic web database engine. *Proceedings of the VLDB Endowment*, 14(12):2695–2698, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476322.

Chen:2021:HHM

[2706] Zihao Chen, Zhizhen Xu, Chen Xu, Juan Soto, Volker Markl, Weining Qian, and Aoying Zhou. HyMAC: a hybrid matrix computation system. *Proceedings of the VLDB Endowment*, 14(12):2699–2702, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476323.

Xu:2021:GOS

[2707] Jingbo Xu, Zhanning Bai, Wenfei Fan, Longbin Lai, Xue Li, Zhao Li, Zhengping Qian, Lei Wang, Lei Wang, Yanyan Wang, Wenyuan Yu, and Jingren Zhou. GraphScope: a one-stop large graph processing system. *Proceedings of the VLDB Endowment*, 14(12):2703–2706, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476324.

Renz-Wieland:2021:JMI

[2708] Alexander Renz-Wieland, Tobias Drobisch, Zoi Kaoudi, Rainer Gemulla, and Volker Markl. Just move it!: dynamic parameter allocation in action. *Proceedings of the VLDB Endowment*, 14(12):2707–2710, July 2021. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3476311.3476325.

Orogat:2021:CDC

[2709] Abdelghny Orogat and Ahmed El-Roby. CBench: demonstrating comprehensive evaluation of question answering systems over knowledge graphs through deep analysis of benchmarks. *Proceedings of the VLDB Endowment*, 14(12):2711–2714, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476326.

Woltmann:2021:PPM

[2710] Lucas Woltmann, Dominik Olwig, Claudio Hartmann, Dirk Habich, and Wolfgang Lehner. PostCENN: postgreSQL with machine learning models for cardinality estimation. *Proceedings of the VLDB Endowment*, 14 (12):2715–2718, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476327.

Li:2021:DDU

[2711] Jinyang Li, Yuval Moskovitch, and H. V. Jagadish. DENOUNCER: detection of unfairness in classifiers. *Proceedings of the VLDB Endowment*, 14 (12):2719–2722, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476328.

Abbar:2021:DQM

[2712] Sofiane Abbar, Rade Stanojevic, Mashaal Musleh, Mohamed ElShrif, and Mohamed Mokbel. A demonstration of QARTA: an ML-based system for accurate map services. *Proceedings of the VLDB Endowment*, 14 (12):2723–2726, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476329.

Smith:2021:TTN

[2713] Jaclyn Smith, Michael Benedikt, Brandon Moore, and Milos Nikolic. TraNCE: transforming nested collections efficiently. *Proceedings of the VLDB Endowment*, 14(12):2727–2730, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476330.

Diestelkamper:2021:DMA

[2714] Ralf Diestelkämper, Seokki Lee, Boris Glavic, and Melanie Herschel. Debugging missing answers for spark queries over nested data with Breadcrumb. *Proceedings of the VLDB Endowment*, 14(12):2731–2734, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476331.

Wu:2021:DPW

[2715] Renzhi Wu, Prem Sakala, Peng Li, Xu Chu, and Yeye He. Demonstration of Panda: a weakly supervised entity matching system. *Proceedings of the VLDB Endowment*, 14(12):2735–2738, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476332.

Liu:2021:ADAb

[2716] Jiabin Liu, Fu Zhu, Chengliang Chai, Yuyu Luo, and Nan Tang. Automatic data acquisition for deep learning. *Proceedings of the VLDB Endowment*, 14(12):2739–2742, July 2021. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3476311.3476333.

Zhou:2021:DSD

[2717] Xuanhe Zhou, Lianyuan Jin, Ji Sun, Xinyang Zhao, Xiang Yu, Jianhua Feng, Shifu Li, Tianqing Wang, Kun Li, and Luyang Liu. DBMind: a self-driving platform in openGauss. *Proceedings of the VLDB Endowment*, 14 (12):2743–2746, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476334.

Lin:2021:DDE

[2718] Qiongqiong Lin, Jiayao Zhang, Jinfei Liu, Kui Ren, Jian Lou, Junxu Liu, Li Xiong, Jian Pei, and Jimeng Sun. Demonstration of dealer: an end-to-end model marketplace with differential privacy. *Proceedings of the VLDB Endowment*, 14(12):2747–2750, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476335.

Mu:2021:AAC

[2719] Tianyu Mu, Hongzhi Wang, Shenghe Zheng, Shaoqing Zhang, Cheng Liang, and Haoyun Tang. Assassin: an automatic classification system based on algorithm selection. *Proceedings of the VLDB Endowment*, 14(12):2751–2754, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476336.

Cao:2021:AMD

[2720] Lei Cao, Dongqing Xiao, Yizhou Yan, Samuel Madden, and Guoliang Li. ATLANTIC: making database differentially private and faster with accuracy guarantee. *Proceedings of the VLDB Endowment*, 14(12):2755–2758, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476337.

Xie:2021:DMS

[2721] Anze Xie, Anders Carlsson, Jason Mohoney, Roger Waleffe, Shanan Peters, Theodoros Rekatsinas, and Shivaram Venkataraman. Demo of Marius: a system for large-scale graph embeddings. *Proceedings of the VLDB Endowment*, 14(12):2759–2762, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476338.

Muller:2021:PPO

[2722] Heiko Müller, Sonia Castelo, Munaf Qazi, and Juliana Freire. From papers to practice: the `openclean` open-source data cleaning library. *Proceedings of the VLDB Endowment*, 14(12):2763–2766, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476339.

Ge:2021:DAD

[2723] Yongming Ge, Vanessa Lin, Maureen Daum, Brandon Haynes, Alvin Cheung, and Magdalena Balazinska. Demonstration of apperception: a database management system for geospatial video data. *Proceedings of the VLDB Endowment*, 14 (12):2767–2770, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476340.

Karatzoglidi:2021:AEC

[2724] Mary Karatzoglidi, Paraskevas Kerasiotis, and Verena Kantere. Automated energy consumption forecasting with EnForce. *Proceedings of the VLDB Endowment*, 14(12):2771–2774, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476341.

Jang:2021:RWG

[2725] Myung-Hwan Jang, Yong-Yeon Jo, and Sang-Wook Kim. RealGraph web: a graph analysis platform on the web. *Proceedings of the VLDB Endowment*, 14(12):2775–2778, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476342.

Ghosh:2021:IDS

[2726] Arthita Ghosh, Deven Bansod, Arpit Narechania, Prashanth Dintyala, Su Timurturkan, and Joy Arulraj. Interactive demonstration of SQLCheck. *Proceedings of the VLDB Endowment*, 14(12):2779–2782, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476343.

Lin:2021:CET

[2727] Yiming Lin, Pramod Khargonekar, Sharad Mehrotra, and Nalini Venkatasubramanian. T-cove: an exposure tracing system based on cleaning wi-fi events on organizational premises. *Proceedings of the VLDB Endowment*, 14(12):2783–2786, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476344.

Wang:2021:DGE

[2728] Paul Y. Wang, Sainyam Galhotra, Romila Pradhan, and Babak Salimi. Demonstration of generating explanations for black-box algorithms using Lewis. *Proceedings of the VLDB Endowment*, 14(12):2787–2790, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476345.

Castelo:2021:ADS

[2729] Sonia Castelo, Rémi Rampin, Aécio Santos, Aline Bessa, Fernando Chirigati, and Juliana Freire. Auctus: a dataset search engine for data discovery and augmentation. *Proceedings of the VLDB Endowment*, 14(12):2791–2794, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476346.

Rehman:2021:DRS

[2730] Mohammed Suhail Rehman, Silu Huang, and Aaron J. Elmore. A demonstration of RELIC: a system for retrospective lineage inference of data workflows. *Proceedings of the VLDB Endowment*, 14(12):2795–2798, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476347.

Chen:2021:SSC

[2731] Zhihao Chen, Haizhen Zhuo, Quanqing Xu, Xiaodong Qi, Chengyu Zhu, Zhao Zhang, Cheqing Jin, Aoying Zhou, Ying Yan, and Hui Zhang. SChain: a scalable consortium blockchain exploiting intra- and inter-block concurrency. *Proceedings of the VLDB Endowment*, 14(12):2799–2802, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476348.

Anastasiou:2021:EEP

[2732] Chrysovalantis Anastasiou, Constantinos Costa, Panos K. Chrysanthis, and

Cyrus Shahabi. EPICGen: an experimental platform for indoor congestion generation and forecasting. *Proceedings of the VLDB Endowment*, 14 (12):2803–2806, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476349`.

Arnaout:2021:WKB

[2733] Hiba Arnaout, Simon Razniewski, Gerhard Weikum, and Jeff Z. Pan. Wikinegata: a knowledge base with interesting negative statements. *Proceedings of the VLDB Endowment*, 14 (12):2807–2810, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476350`.

Zhu:2021:FEE

[2734] Jinwei Zhu, Kun Cheng, Jiayang Liu, and Liang Guo. Full encryption: an end to end encryption mechanism in GaussDB. *Proceedings of the VLDB Endowment*, 14(12):2811–2814, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476351`.

Mandamadiotis:2021:DIA

[2735] Antonis Mandamadiotis, Stavroula Eleftherakis, Apostolos Glenis, Dimitrios Skoutas, Yannis Stavrakas, and Georgia Koutrika. DatAgent: the imminent age of intelligent data assistants. *Proceedings of the VLDB Endowment*, 14(12):2815–2818, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476352`.

Rezig:2021:DDD

[2736] El Kindi Rezig, Anshul Bhandari, Anna Fariha, Benjamin Price, Allan Vanterpool, Vijay Gadepally, and Michael Stonebraker. DICE: data discovery by example. *Proceedings of the VLDB Endowment*, 14(12):2819–2822, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476353`.

Schuhknecht:2021:AAP

[2737] Felix Schuhknecht, Aaron Priesterroth, Justus Henneberg, and Reza Salkhordeh. AnyOLAP: analytical processing of arbitrary data-intensive applications without ETL. *Proceedings of the VLDB Endowment*, 14 (12):2823–2826, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476354`.

Jacob:2021:DEB

[2738] Vincent Jacob, Fei Song, Arnaud Stiegler, Bijan Rad, Yanlei Diao, and Nesime Tatbul. A demonstration of the Exathlon benchmarking platform for explainable anomaly detection. *Proceedings of the VLDB Endowment*, 14(12):2827–2830, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476355`.

Shaikhha:2021:IRH

[2739] Amir Shaikhha, Maximilian Schleich, and Dan Olteanu. An intermediate representation for hybrid database and machine learning workloads. *Proceedings of the VLDB Endowment*, 14(12):2831–2834, July

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476356.

Pastor:2021:HDY

[2740] Eliana Pastor, Andrew Gavgavian, Elena Baralis, and Luca de Alfaro. How divergent is your data? *Proceedings of the VLDB Endowment*, 14 (12):2835–2838, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476357.

Berro:2021:ERP

[2741] Auday Berro, Mohammad-Ali Yaghub Zade Fard, Marcos Baez, Boualem Benatallah, and Khalid Benabdeslem. An extensible and reusable pipeline for automated utterance paraphrases. *Proceedings of the VLDB Endowment*, 14 (12):2839–2842, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476358.

Beedkar:2021:CGD

[2742] Kaustubh Beedkar, David Brekardin, Jorge-Anulfo Quiané-Ruiz, and Volker Markl. Compliant geo-distributed data processing in action. *Proceedings of the VLDB Endowment*, 14(12):2843–2846, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476359.

Yadav:2021:QDV

[2743] Piyush Yadav, Dhaval Salwala, Felipe Arruda Pontes, Praneet Dhingra, and Edward Curry. Query-driven video event processing for the Internet of Multimedia Things. *Proceedings of the VLDB Endowment*, 14(12):2847–2850, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476360.

Koutroumanis:2021:DNU

[2744] Nikolaos Koutroumanis, Nikolaos Kousathanas, Christos Doulkeridis, and Akrivi Vlachou. A demonstration of NoDA: unified access to NoSQL stores. *Proceedings of the VLDB Endowment*, 14(12):2851–2854, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476361.

Sen:2021:APP

[2745] Rathijit Sen, Abhishek Roy, Alekh Jindal, Rui Fang, Jeff Zheng, Xiaolei Liu, and Ruiping Li. AutoExecutor: predictive parallelism for Spark SQL queries. *Proceedings of the VLDB Endowment*, 14(12):2855–2858, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476362.

Liu:2021:CBA

[2746] Jiaxiang Liu, Karl Knopf, Yiqing Tan, Bolin Ding, and Xi He. Catch a blowfish alive: a demonstration of policy-aware differential privacy for interactive data exploration. *Proceedings of the VLDB Endowment*, 14 (12):2859–2862, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476363.

Ouellette:2021:RDL

[2747] Paul Ouellette, Aidan Sciortino, Fatemeh Nargesian, Bahar Ghadiri Bashardoost, Erkang Zhu, Ken Q. Pu, and Renée J. Miller. RONIN: data lake exploration. *Proceedings of the*

VLDB Endowment, 14(12):2863–2866, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476364.

Boniol:2021:SAS

[2748] Paul Boniol, John Paparrizos, Themis Palpanas, and Michael J. Franklin. SAND in action: subsequence anomaly detection for streams. *Proceedings of the VLDB Endowment*, 14(12): 2867–2870, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476365.

Koutras:2021:VAM

[2749] Christos Koutras, Kyriakos Psarakis, George Siachamis, Andra Ionescu, Marios Fragkoulis, Angela Bonifati, and Asterios Katsifodimos. Valentine in action: matching tabular data at scale. *Proceedings of the VLDB Endowment*, 14(12):2871–2874, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476366.

Guan:2021:GDE

[2750] Sheng Guan, Hanchao Ma, Sutanay Choudhury, and Yinghui Wu. GEDet: detecting erroneous nodes with a few examples. *Proceedings of the VLDB Endowment*, 14(12):2875–2878, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476367.

Fan:2021:GUE

[2751] Wenfei Fan, Tao He, Longbin Lai, Xue Li, Yong Li, Zhao Li, Zhengping Qian, Chao Tian, Lei Wang, Jingbo Xu, Youyang Yao, Qiang Yin, Wenyuan Yu, Jingren Zhou, Diwen Zhu, and Rong Zhu. GraphScope: a unified engine for big graph processing. *Proceedings of the VLDB Endowment*, 14(12):2879–2892, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476369.

Shang:2021:DSI

[2752] Zeyuan Shang, Emanuel Zgraggen, Benedetto Buratti, Philipp Eichmann, Navid Karimeddiny, Charlie Meyer, Wesley Runnels, and Tim Kraska. Davos: a system for interactive data-driven decision making. *Proceedings of the VLDB Endowment*, 14 (12):2893–2905, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476370.

Qin:2021:MEU

[2753] An Qin, Mengbai Xiao, Yongwei Wu, Xinjie Huang, and Xiaodong Zhang. Mixer: efficiently understanding and retrieving visual content at web-scale. *Proceedings of the VLDB Endowment*, 14(12):2906–2917, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476371.

Justo:2021:TPF

[2754] David Justo, Shaoqing Yi, Lukas Stadler, Nadia Polikarpova, and Arun Kumar. Towards a polyglot framework for factorized ML. *Proceedings of the VLDB Endowment*, 14(12):2918–2931, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476372.

Dayan:2021:EML

[2755] Niv Dayan, Moshe Twitto, Yuval Rochman, Uri Beitler, Itai Ben Zion, Edward Bortnikov, Shmuel Dashevsky, Ofer Frishman, Evgeni Ginzburg, Igal Maly, Avraham (Poza) Meir, Mark Mokryn, Iddo Naiss, and Noam Rabinovich. The end of Moore's law and the rise of the data processor. *Proceedings of the VLDB Endowment*, 14 (12):2932–2944, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476373.

Murray:2021:TDM

[2756] Derek G. Murray, Jirí Simsa, Ana Klimovic, and Ihor Indyk. `tf.data`: a machine learning data processing framework. *Proceedings of the VLDB Endowment*, 14(12):2945–2958, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476374.

Eltabakh:2021:BBA

[2757] Mohamed Eltabakh, Anantha Subramanian, Awny Al-Omari, Mohammed Al-Kateb, Sanjay Nair, Mahbub Hasan, Wellington Cabrera, Charles Zhang, Amit Kishore, and Snigdha Prasad. Not black-box anymore!: enabling analytics-aware optimizations in Teradata Vantage. *Proceedings of the VLDB Endowment*, 14(12):2959–2971, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476375.

Chen:2021:FAE

[2758] Yingda Chen, Jiamang Wang, Yifeng Lu, Ying Han, Zhiqiang Lv, Xuebin Min, Hua Cai, Wei Zhang, Haochuan Fan, Chao Li, Tao Guan, Wei Lin, Yangqing Jia, and Jingren Zhou. Fangorn: adaptive execution framework for heterogeneous workloads on shared clusters. *Proceedings of the VLDB Endowment*, 14(12):2972–2985, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476376.

Agiwal:2021:NPS

[2759] Ankur Agiwal, Kevin Lai, Gokul Nath Babu Manoharan, Indrajit Roy, Jagan Sankaranarayanan, Hao Zhang, Tao Zou, Min Chen, Zongchang (Jim) Chen, Ming Dai, Thanh Do, Haoyu Gao, Haoyan Geng, Raman Grover, Bo Huang, Yanlai Huang, Zhi (Adam) Li, Jianyi Liang, Tao Lin, Li Liu, Yao Liu, Xi Mao, Yalan (Maya) Meng, Prashant Mishra, Jay Patel, Rajesh S. R., Vijayshankar Raman, Sourashis Roy, Mayank Singh Shishodia, Tianhang Sun, Ye (Justin) Tang, Junichi Tatemura, Sagar Trehan, Ramkumar Vadali, Prasanna Venkatasubramanian, Gensheng Zhang, Kefei Zhang, Yupu Zhang, Zeleng Zhuang, Goetz Graefe, Divyakant Agrawal, Jeff Naughton, Sujata Kosalge, and Hakan Hacıgümüş. Napa: powering scalable data warehousing with robust query performance at Google. *Proceedings of the VLDB Endowment*, 14 (12):2986–2997, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476377.

Lee:2021:ABR

[2760] Rubao Lee, Minghong Zhou, Chi Li, Shenggang Hu, Jianping Teng, Dongyang Li, and Xiaodong Zhang. The art of balance: a RateupDBTM experience of building a CPU/GPU hybrid database product. *Proceedings of the VLDB Endowment*, 14 (12):2999–3013, July 2021. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476378.

Cheng:2021:RTL

[2761] Audrey Cheng, Xiao Shi, Lu Pan, Anthony Simpson, Neil Wheaton, Shilpa Lawande, Nathan Bronson, Peter Bailis, Natacha Crooks, and Ion Stoica. RAMP-TAO: layering atomic transactions on Facebook's online TAO data store. *Proceedings of the VLDB Endowment*, 14(12):3014–3027, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476379.

Li:2021:OAD

[2762] Guoliang Li, Xuanhe Zhou, Ji Sun, Xiang Yu, Yue Han, Lianyuan Jin, Wenbo Li, Tianqing Wang, and Shifu Li. openGauss: an autonomous database system. *Proceedings of the VLDB Endowment*, 14(12):3028–3042, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476380.

Potharaju:2021:HIS

[2763] Rahul Potharaju, Terry Kim, Eunjin Song, Wentao Wu, Lev Novik, Apoorve Dave, Andrew Fogarty, Pouria Pirzadeh, Vidip Acharya, Gurleen Dhody, Jiying Li, Sinduja Ramanujam, Nicolas Bruno, César A. Galindo-Legaria, Vivek Narasayya, Surajit Chaudhuri, Anil K. Nori, Tomas Talius, and Raghu Ramakrishnan. Hyperspace: the indexing subsystem of Azure Synapse. *Proceedings of the VLDB Endowment*, 14(12):3043–3055, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476382.

Zheng:2021:SVB

[2764] Bolong Zheng, Lei Bi, Juan Cao, Hua Chai, Jun Fang, Lu Chen, Yunjun Gao, Xiaofang Zhou, and Christian S. Jensen. SpeakNav: voice-based route description language understanding for template-driven path search. *Proceedings of the VLDB Endowment*, 14(12):3056–3068, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476383.

Gomes:2021:RML

[2765] Ana Sofia Gomes, João Oliveirinha, Pedro Cardoso, and Pedro Bizarro. Railgun: managing large streaming windows under MAD requirements. *Proceedings of the VLDB Endowment*, 14(12):3069–3082, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476384.

Edara:2021:BMW

[2766] Pavan Edara and Mosha Pasumansky. Big metadata: when metadata is big data. *Proceedings of the VLDB Endowment*, 14(12):3083–3095, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476385.

Stoddard:2021:TRF

[2767] Josh Stoddard, Adam Mustafa, and Naveen Goela. Tanium Reveal: a federated search engine for querying unstructured file data on large enterprise networks. *Proceedings of the VLDB Endowment*, 14(12):3096–3109, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476386.

Gencer:2021:HJL

[2768] Can Gencer, Marko Topolnik, Viliam Ďurina, Emin Demirci, Ensar B. Kahveci, Ali Gürbüz, Ondřej Lukáš, József Bartók, Grzegorz Gierlach, František Hartman, Ufuk Yılmaz, Mehmet Doğan, Mohamed Mandouh, Marios Fragkoulis, and Asterios Katsifodimos. Hazelcast Jet: low-latency stream processing at the 99.99-th percentile. *Proceedings of the VLDB Endowment*, 14(12):3110–3121, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476387.

Roy:2021:SWO

[2769] Abhishek Roy, Alekh Jindal, Priyanka Gomatam, Xiating Ouyang, Ashit Gosalia, Nishkam Ravi, Swinky Mann, and Prakhar Jain. SparkCruise: workload optimization in managed spark clusters at Microsoft. *Proceedings of the VLDB Endowment*, 14(12):3122–3134, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476388.

Akidau:2021:WSP

[2770] Tyler Akidau, Edmon Begoli, Slava Chernyak, Fabian Hueske, Kathryn Knight, Kenneth Knowles, Daniel Mills, and Dan Sotolongo. Watermarks in stream processing systems: semantics and comparative analysis of Apache Flink and Google cloud dataflow. *Proceedings of the VLDB Endowment*, 14(12):3135–3147, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476389.

Power:2021:CBD

[2771] Conor Power, Hiren Patel, Alekh Jindal, Jyoti Leeka, Bob Jenkins, Michael Rys, Ed Triou, Dexin Zhu, Lucky Katahanas, Chakrapani Bhat Talapady, Joshua Rowe, Fan Zhang, Rich Draves, Marc Friedman, Ivan Santa Maria Filho, and Amrish Kumar. The Cosmos big data platform at Microsoft: over a decade of progress and a decade to look forward. *Proceedings of the VLDB Endowment*, 14(12):3148–3161, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476390.

Pandis:2021:EAR

[2772] Ippokratis Pandis. The evolution of Amazon Redshift. *Proceedings of the VLDB Endowment*, 14(12):3162–3174, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476391.

Razniewski:2021:LMK

[2773] Simon Razniewski, Hiba Arnaout, Shrestha Ghosh, and Fabian Suchanek. On the limits of machine knowledge: completeness, recall and negation in web-scale knowledge bases. *Proceedings of the VLDB Endowment*, 14 (12):3175–3177, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476401.

Orr:2021:MMP

[2774] Laurel Orr, Atindriyo Sanyal, Xiao Ling, Karan Goel, and Megan Leszczynski. Managing ML pipelines: feature stores and the coming wave of embedding ecosystems. *Proceedings of the VLDB Endowment*, 14

(12):3178–3181, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476402.

Li:2021:DAM

[2775] Yuliang Li, Xiaolan Wang, Zhengjie Miao, and Wang-Chiew Tan. Data augmentation for ML-driven data preparation and integration. *Proceedings of the VLDB Endowment*, 14(12):3182–3185, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476403.

Zalipynis:2021:ADP

[2776] Ramon Antonio Rodriges Zalipynis. Array DBMS: past, present, and (near) future. *Proceedings of the VLDB Endowment*, 14(12):3186–3189, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476404.

Li:2021:MLD

[2777] Guoliang Li, Xuanhe Zhou, and Lei Cao. Machine learning for databases. *Proceedings of the VLDB Endowment*, 14(12):3190–3193, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476405.

Kargar:2021:ELN

[2778] Saeed Kargar and Faisal Nawab. Extending the lifetime of NVM: challenges and opportunities. *Proceedings of the VLDB Endowment*, 14(12):3194–3197, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476406.

Echihabi:2021:NTH

[2779] Karima Echihabi, Kostas Zoumpatianos, and Themis Palpanas. New trends in high-D vector similarity search: AI-driven, progressive, and distributed. *Proceedings of the VLDB Endowment*, 14(12):3198–3201, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476407.

Jindal:2021:MLC

[2780] Alekh Jindal and Matteo Interlandi. Machine learning for cloud data systems: the progress so far and the path forward. *Proceedings of the VLDB Endowment*, 14(12):3202–3205, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476408.

Davidson:2021:JCT

[2781] Susan B. Davidson. It's not just cookies and tea. *Proceedings of the VLDB Endowment*, 14(12):3206, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476409.

Neumann:2021:ECQ

[2782] Thomas Neumann. Evolution of a compiling query engine. *Proceedings of the VLDB Endowment*, 14(12):3207–3210, July 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3476311.3476410.

Pavlo:2021:MYD

[2783] Andrew Pavlo, Matthew Butrovich, Lin Ma, Prashanth Menon, Wan Shen Lim, Dana Van Aken, and William Zhang. Make your database system dream of electric sheep: towards self-driving operation. *Proceedings of the VLDB Endowment*, 14(12):3211–3221, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476411`.

Kraska:2021:TIO

[2784] Tim Kraska. Towards instance-optimized data systems. *Proceedings of the VLDB Endowment*, 14 (12):3222–3232, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476392`.

Weikum:2021:KGD

[2785] Gerhard Weikum. Knowledge graphs 2021: a data odyssey. *Proceedings of the VLDB Endowment*, 14 (12):3233–3238, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476393`.

Ives:2021:FDB

[2786] Zachary G. Ives, Rachel Pottinger, Arun Kumar, Johannes Gehrke, and Jana Giceva. The future of data(base) education: is the “cow book” dead? *Proceedings of the VLDB Endowment*, 14(12):3239, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476394`.

Remis:2021:UVI

[2787] Luis Remis and Chaunté W. Lacewell. Using VDMS to index and search 100M images. *Proceedings of the VLDB Endowment*, 14(12):3240–3252, July 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3476311.3476381`.

Liu:2021:TEF

[2788] Jian Liu, Kefei Wang, and Feng Chen. TSCache: an efficient flash-based caching scheme for time-series data workloads. *Proceedings of the VLDB Endowment*, 14(13):3253–3266, September 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3484224.3484225`.

Wang:2021:MRL

[2789] Huayi Wang, Jingfan Meng, Long Gong, Jun Xu, and Mitsunori Ogihara. MP-RW-LSH: an efficient multi-probe LSH solution to ANNS-L_1. *Proceedings of the VLDB Endowment*, 14(13):3267–3280, September 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3484224.3484226`.

Mailis:2021:VSK

[2790] Theofilos Mailis, Yannis Kotidis, Stamatis Christoforidis, Evgeny Kharlamov, and Yannis Ioannidis. View selection over knowledge graphs in triple stores. *Proceedings of the VLDB Endowment*, 14(13):3281–3294, September 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3484224.3484227`.

Li:2021:FHO

[2791] Dongjie Li, Siyi Lv, Yanyu Huang, Yijing Liu, Tong Li, Zheli Liu, and Liang Guo. Frequency-hiding order-preserving encryption with small client storage. *Proceedings of the VLDB Endowment*, 14(13):3295–3307, September 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3484224.3484228`.

Koutsoukos:2021:MMR

[2792] Dimitrios Koutsoukos, Ingo Müller, Renato Marroquín, Ana Klimovic, and Gustavo Alonso. Modularis: modular relational analytics over heterogeneous distributed platforms. *Proceedings of the VLDB Endowment*, 14(13): 3308–3321, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484229.

Lou:2021:TTA

[2793] Yunkai Lou, Chaokun Wang, Tiankai Gu, Hao Feng, Jun Chen, and Jeffrey Xu Yu. Time-topology analysis. *Proceedings of the VLDB Endowment*, 14(13):3322–3334, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484230.

Bernau:2021:QIC

[2794] Daniel Bernau, Günther Eibl, Philip W. Grassal, Hannah Keller, and Florian Kerschbaum. Quantifying identifiability to choose and audit ϵ in differentially private deep learning. *Proceedings of the VLDB Endowment*, 14(13): 3335–3347, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484231.

Laigner:2021:DMM

[2795] Rodrigo Laigner, Yongluan Zhou, Marcos Antonio Vaz Salles, Yijian Liu, and Marcos Kalinowski. Data management in microservices: state of the practice, challenges, and research directions. *Proceedings of the VLDB Endowment*, 14(13):3348–3361, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484232.

Ammerlaan:2021:PDM

[2796] Remmelt Ammerlaan, Gilbert Antonius, Marc Friedman, H. M. Sajjad Hossain, Alekh Jindal, Peter Orenberg, Hiren Patel, Shi Qiao, Vijay Ramani, Lucas Rosenblatt, Abhishek Roy, Irene Shaffer, Soundarajan Srinivasan, and Markus Weimer. PerfGuard: deploying ML-for-systems without performance regressions, almost! *Proceedings of the VLDB Endowment*, 14(13):3362–3375, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484233.

Ding:2021:DDS

[2797] Bailu Ding, Surajit Chaudhuri, Johannes Gehrke, and Vivek Narasayya. DSB: a decision support benchmark for workload-driven and traditional database systems. *Proceedings of the VLDB Endowment*, 14(13):3376–3388, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484234.

Hernandez:2021:CHP

[2798] Daniel Hernández, Luis Galárraga, and Katja Hose. Computing how-provenance for SPARQL queries via query rewriting. *Proceedings of the VLDB Endowment*, 14(13):3389–3401, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484235.

Wang:2021:UUD

[2799] Junxiong Wang, Immanuel Trummer, and Debabrota Basu. UDO: universal database optimization using reinforcement learning. *Proceedings of the VLDB Endowment*, 14(13):3402–3414, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484236.

Feldmann:2021:ITA

[2800] Anja Feldmann. Internet traffic analysis at scale. *Proceedings of the VLDB Endowment*, 14(13):3415, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484237.

Koutra:2021:PSG

[2801] Danai Koutra. The power of summarization in graph mining and learning: smaller data, faster methods, more interpretability. *Proceedings of the VLDB Endowment*, 14(13):3416, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484238.

Shah:2021:SPL

[2802] Nigam Shah. Summarizing patients like mine via an on-demand consultation service. *Proceedings of the VLDB Endowment*, 14(13):3417, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484242.

Vanschoren:2021:TSO

[2803] Joaquin Vanschoren. Towards scalable online machine learning collaborations with OpenML. *Proceedings of the VLDB Endowment*, 14 (13):3418, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484239.

Vartak:2021:MMI

[2804] Manasi Vartak. From ML models to intelligent applications: the rise of MLOps. *Proceedings of the VLDB Endowment*, 14(13):3419, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484240.

Zaharia:2021:DPF

[2805] Matei Zaharia. Designing production-friendly machine learning. *Proceedings of the VLDB Endowment*, 14 (13):3420, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3484224.3484241.

Zhao:2021:ASA

[2806] Kang Zhao, Liuyihan Song, Yingya Zhang, Pan Pan, Yinghui Xu, and Rong Jin. ANN softmax: acceleration of extreme classification training. *Proceedings of the VLDB Endowment*, 15(1):1–10, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485451.

Yu:2021:WTD

[2807] Gyeong-In Yu, Saeed Amizadeh, Sehoon Kim, Artidoro Pagnoni, Ce Zhang, Byung-Gon Chun, Markus Weimer, and Matteo Interlandi. WindTunnel: towards differentiable ML pipelines beyond a single model. *Proceedings of the VLDB Endowment*, 15 (1):11–20, September 2021. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485452.

Skiadopoulos:2021:DDO

[2808] Athinagoras Skiadopoulos, Qian Li, Peter Kraft, Kostis Kaffes, Daniel Hong, Shana Mathew, David Bestor, Michael Cafarella, Vijay Gadepally, Goetz Graefe, Jeremy Kepner, Christos Kozyrakis, Tim Kraska, Michael Stonebraker, Lalith Suresh, and Matei Zaharia. DBOS: a DBMS-oriented operating system. *Proceedings of the VLDB Endowment*, 15(1):21–30, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485454.

Jain:2021:DIA

[2809] Arjit Jain, Sunita Sarawagi, and Prithviraj Sen. Deep indexed active learning for matching heterogeneous entity representations. *Proceedings of the VLDB Endowment*, 15 (1):31–45, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485455.

Zhou:2021:LQR

[2810] Xuanhe Zhou, Guoliang Li, Chengliang Chai, and Jianhua Feng. A learned query rewrite system using Monte Carlo tree search. *Proceedings of the VLDB Endowment*, 15(1):46–58, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485456.

Lin:2021:DCP

[2811] Yin Lin, Brit Youngmann, Yuval Moskovitch, H. V. Jagadish, and Tova Milo. On detecting cherry-picked generalizations. *Proceedings of the VLDB Endowment*, 15(1):59–71, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485457.

Wang:2021:FNF

[2812] Jiayi Wang, Chengliang Chai, Jiabin Liu, and Guoliang Li. FACE: a normalizing flow based cardinality estimator. *Proceedings of the VLDB Endowment*, 15(1):72–84, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485458.

Sun:2021:LCE

[2813] Ji Sun, Jintao Zhang, Zhaoyan Sun, Guoliang Li, and Nan Tang. Learned cardinality estimation: a design space exploration and a comparative evaluation. *Proceedings of the VLDB Endowment*, 15(1):85–97, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485459.

He:2021:DAD

[2814] Dong He, Maureen Daum, Walter Cai, and Magdalena Balazinska. DeepEverest: accelerating declarative top-K queries for deep neural network interpretation. *Proceedings of the VLDB Endowment*, 15(1):98–111, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485460.

Chatterjee:2021:CCC

[2815] Subarna Chatterjee, Meena Jagadeesan, Wilson Qin, and Stratos Idreos. Cosine: a cloud-cost optimized self-designing key–value storage engine. *Proceedings of the VLDB Endowment*, 15(1):112–126, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485461.

Adnan:2021:ARS

[2816] Muhammad Adnan, Yassaman Ebrahimzadeh Maboud, Divya Mahajan, and Prashant J. Nair. Accelerating recommendation system training by leveraging popular choices. *Proceedings of the VLDB Endowment*, 15(1):127–140, September 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3485450.3485462.

Yang:2021:BCE

[2817] Jianye Yang, Yun Peng, and Wenjie Zhang. (p, q)-biclique counting and enumeration for large sparse bipartite graphs. *Proceedings of the VLDB Endowment*, 15(2):141–153, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489497.

Graur:2021:EQL

[2818] Dan Graur, Ingo Müller, Mason Proffitt, Ghislain Fourny, Gordon T. Watts, and Gustavo Alonso. Evaluating query languages and systems for high-energy physics data. *Proceedings of the VLDB Endowment*, 15(2):154–168, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489498.

Hao:2021:DHC

[2819] Kongzhang Hao, Long Yuan, and Wenjie Zhang. Distributed hop-constrained s–t simple path enumeration at billion scale. *Proceedings of the VLDB Endowment*, 15(2):169–182, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489499.

Fang:2021:EAO

[2820] Jingzhi Fang, Yanyan Shen, Yue Wang, and Lei Chen. ETO: accelerating optimization of DNN operators by high-performance tensor program reuse. *Proceedings of the VLDB Endowment*, 15(2):183–195, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489500.

Grulich:2021:BEE

[2821] Philipp Marian Grulich, Steffen Zeuch, and Volker Markl. Babelfish: efficient execution of polyglot queries. *Proceedings of the VLDB Endowment*, 15 (2):196–210, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489501.

Zhou:2021:BCU

[2822] Alexander Zhou, Yue Wang, and Lei Chen. Butterfly counting on uncertain bipartite graphs. *Proceedings of the VLDB Endowment*, 15(2):211–223, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489502.

Cui:2021:MGG

[2823] Yue Cui, Kai Zheng, Dingshan Cui, Jiandong Xie, Liwei Deng, Feiteng Huang, and Xiaofang Zhou. METRO: a generic graph neural network framework for multivariate time series forecasting. *Proceedings of the VLDB Endowment*, 15(2):224–236, October

2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489503.

Ge:2021:LAE

[2824] Congcong Ge, Xiaoze Liu, Lu Chen, Yunjun Gao, and Baihua Zheng. LargeEA: aligning entities for large-scale knowledge graphs. *Proceedings of the VLDB Endowment*, 15 (2):237–245, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489504.

Lu:2021:HHG

[2825] Kejing Lu, Mineichi Kudo, Chuan Xiao, and Yoshiharu Ishikawa. HVS: hierarchical graph structure based on Voronoi diagrams for solving approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 15 (2):246–258, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489506.

Arman:2021:OHP

[2826] Arif Arman and Dmitri Loguinov. Origami: a high-performance mergesort framework. *Proceedings of the VLDB Endowment*, 15(2):259–271, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489507.

Wu:2021:LSL

[2827] Renzhi Wu, Bolin Ding, Xu Chu, Zhewei Wei, Xiening Dai, Tao Guan, and Jingren Zhou. Learning to be a statistician: learned estimator for number of distinct values. *Proceedings of the VLDB Endowment*, 15 (2):272–284, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489508.

Yu:2021:PFP

[2828] Shangdi Yu, Yiqiu Wang, Yan Gu, Laxman Dhulipala, and Julian Shun. ParChain: a framework for parallel hierarchical agglomerative clustering using nearest-neighbor chain. *Proceedings of the VLDB Endowment*, 15 (2):285–298, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489509.

Chauhan:2021:ARP

[2829] Komal Chauhan, Kartik Jain, Sayan Ranu, Srikanta Bedathur, and Amitabha Bagchi. Answering regular path queries through exemplars. *Proceedings of the VLDB Endowment*, 15(2):299–311, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489510.

Miao:2021:SHE

[2830] Xupeng Miao, Hailin Zhang, Yining Shi, Xiaonan Nie, Zhi Yang, Yangyu Tao, and Bin Cui. HET: scaling out huge embedding model training via cache-enabled distributed framework. *Proceedings of the VLDB Endowment*, 15(2):312–320, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489511.

Li:2021:FFG

[2831] Pengfei Li, Yu Hua, Jingnan Jia, and Pengfei Zuo. FINEdex: a fine-grained learned index scheme for scalable and concurrent memory systems. *Proceedings of the VLDB*

Endowment, 15(2):321–334, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489512.

Bai:2021:TTA

[2832] Jiyang Bai and Peixiang Zhao. TaGSim: type-aware graph similarity learning and computation. *Proceedings of the VLDB Endowment*, 15 (2):335–347, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489513.

Zhu:2021:AIC

[2833] Yuqing Zhu, Jing Tang, Xueyan Tang, and Lei Chen. Analysis of influence contribution in social advertising. *Proceedings of the VLDB Endowment*, 15(2):348–360, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489514.

Theodorakis:2021:SSN

[2834] Georgios Theodorakis, Fotios Kounelis, Peter Pietzuch, and Holger Pirk. Scabbard: single-node fault-tolerant stream processing. *Proceedings of the VLDB Endowment*, 15(2):361–374, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489515.

Konstantinidis:2021:EPC

[2835] George Konstantinidis, Jet Holt, and Adriane Chapman. Enabling personal consent in databases. *Proceedings of the VLDB Endowment*, 15(2):375–387, October 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3489496.3489516.

Liu:2021:ESB

[2836] Yejia Liu, Weiyuan Wu, Lampros Flokas, Jiannan Wang, and Eugene Wu. Enabling SQL-based training data debugging for federated learning. *Proceedings of the VLDB Endowment*, 15(3):388–400, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494125.

Vaidya:2021:LQL

[2837] Kapil Vaidya, Anshuman Dutt, Vivek Narasayya, and Surajit Chaudhuri. Leveraging query logs and machine learning for parametric query optimization. *Proceedings of the VLDB Endowment*, 15(3):401–413, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494126.

Lu:2021:PTS

[2838] Yao Lu, Srikanth Kandula, Arnd Christian König, and Surajit Chaudhuri. Pre-training summarization models of structured datasets for cardinality estimation. *Proceedings of the VLDB Endowment*, 15(3):414–426, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494127.

Rao:2021:XEF

[2839] Susie Xi Rao, Shuai Zhang, Zhichao Han, Zitao Zhang, Wei Min, Zhiyao Chen, Yinan Shan, Yang Zhao, and Ce Zhang. xFraud: explainable fraud transaction detection. *Proceedings of the VLDB Endowment*, 15(3): 427–436, November 2021. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3494124.3494128.

Yuan:2021:SMG

[2840] Ye Yuan, Delong Ma, Zhenyu Wen, Zhiwei Zhang, and Guoren Wang. Subgraph matching over graph federation. *Proceedings of the VLDB Endowment*, 15(3):437–450, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494129.

Niu:2021:PBD

[2841] Xing Niu, Boris Glavic, Ziyu Liu, Pengyuan Li, Dieter Gawlick, Vasudha Krishnaswamy, Zhen Hua Liu, and Danica Porobic. Provenance-based data skipping. *Proceedings of the VLDB Endowment*, 15(3):451–464, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494130.

Jin:2021:DTL

[2842] Di Jin, Bunyamin Sisman, Hao Wei, Xin Luna Dong, and Danai Koutra. Deep transfer learning for multi-source entity linkage via domain adaptation. *Proceedings of the VLDB Endowment*, 15(3):465–477, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494131.

Xing:2021:EEI

[2843] Lu Xing, Eric Lee, Tong An, Bo-Cheng Chu, Ahmed Mahmood, Ahmed M. Aly, Jianguo Wang, and Walid G. Aref. An experimental evaluation and investigation of waves of misery in r-trees. *Proceedings of the VLDB Endowment*, 15(3):478–490, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494132.

Liu:2021:PPR

[2844] Yongyi Liu, Ahmed R. Mahmood, Amr Magdy, and Sergio Rey. PRUC: P-regions with user-defined constraint. *Proceedings of the VLDB Endowment*, 15(3):491–503, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494133.

Chen:2021:PIR

[2845] Yile Chen, Xiucheng Li, Gao Cong, Cheng Long, Zhifeng Bao, Shang Liu, Wanli Gu, and Fuzheng Zhang. Points-of-interest relationship inference with spatial-enriched graph neural networks. *Proceedings of the VLDB Endowment*, 15(3):504–512, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494134.

Chan:2021:SSA

[2846] Tsz Nam Chan, Pak Lon Ip, Leong Hou U., Byron Choi, and Jianliang Xu. SAFE: a share-and-aggregate bandwidth exploration framework for kernel density visualization. *Proceedings of the VLDB Endowment*, 15(3):513–526, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494135.

Dittrich:2021:NYD

[2847] Jens Dittrich, Joris Nix, and Christian Schön. The next 50 years in database indexing or: the case for automatically generated index structures. *Proceedings of the VLDB*

Endowment, 15(3):527–540, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494136.

Chapnik:2021:DDA

[2848] Koral Chapnik, Ilya Kolchinsky, and Assaf Schuster. DARLING: data-aware load shedding in complex event processing systems. *Proceedings of the VLDB Endowment*, 15(3):541–554, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494137.

Zhuo:2021:RMO

[2849] Danyang Zhuo, Kaiyuan Zhang, Zhuohan Li, Siyuan Zhuang, Stephanie Wang, Ang Chen, and Ion Stoica. Rearchitecting in-memory object stores for low latency. *Proceedings of the VLDB Endowment*, 15(3): 555–568, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494138.

Ma:2021:MTE

[2850] Pingchuan Ma and Shuai Wang. MT-teql: evaluating and augmenting neural NLIDB on real-world linguistic and schema variations. *Proceedings of the VLDB Endowment*, 15(3):569–582, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494139.

Shi:2021:TPE

[2851] Jessica Shi, Laxman Dhulipala, and Julian Shun. Theoretically and practically efficient parallel nucleus decomposition. *Proceedings of the VLDB Endowment*, 15(3):583–596, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494140.

Lu:2021:AHP

[2852] Baotong Lu, Jialin Ding, Eric Lo, Umar Farooq Minhas, and Tianzheng Wang. APEX: a high-performance learned index on persistent memory. *Proceedings of the VLDB Endowment*, 15(3):597–610, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494141.

Campos:2021:UTS

[2853] David Campos, Tung Kieu, Chenjuan Guo, Feiteng Huang, Kai Zheng, Bin Yang, and Christian S. Jensen. Unsupervised time series outlier detection with diversity-driven convolutional ensembles. *Proceedings of the VLDB Endowment*, 15(3):611–623, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494142.

Miao:2021:EED

[2854] Xiaoye Miao, Yangyang Wu, Lu Chen, Yunjun Gao, Jun Wang, and Jianwei Yin. Efficient and effective data imputation with influence functions. *Proceedings of the VLDB Endowment*, 15(3):624–632, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494143.

Kochsiek:2021:PTK

[2855] Adrian Kochsiek and Rainer Gemulla. Parallel training of knowledge graph embedding models: a comparison of techniques. *Proceedings of the VLDB Endowment*, 15(3):633–645, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494144.

Vitagliano:2021:DLT

[2856] Gerardo Vitagliano, Lan Jiang, and Felix Naumann. Detecting layout templates in complex multiregion files. *Proceedings of the VLDB Endowment*, 15(3):646–658, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494145.

Maliszewski:2021:WPJ

[2857] Kajetan Maliszewski, Jorge-Arnulfo Quiané-Ruiz, Jonas Traub, and Volker Markl. What is the price for joining securely?: benchmarking equijoins in trusted execution environments. *Proceedings of the VLDB Endowment*, 15(3):659–672, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494146.

Ho:2021:ETP

[2858] Van Long Ho, Nguyen Ho, and Torben Bach Pedersen. Efficient temporal pattern mining in big time series using mutual information. *Proceedings of the VLDB Endowment*, 15(3):673–685, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494147.

Zhang:2021:ELC

[2859] Junhua Zhang, Long Yuan, Wentao Li, Lu Qin, and Ying Zhang. Efficient label-constrained shortest path queries on road networks: a tree decomposition approach. *Proceedings of the VLDB Endowment*, 15(3):686–698, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494148.

Suri:2021:ENC

[2860] Sahaana Suri, Ihab F. Ilyas, Christopher Ré, and Theodoros Rekatsinas. Ember: no-code context enrichment via similarity-based keyless joins. *Proceedings of the VLDB Endowment*, 15(3):699–712, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494149.

Vu:2021:IPE

[2861] Tin Vu, Ahmed Eldawy, Vagelis Hristidis, and Vassilis Tsotras. Incremental partitioning for efficient spatial data analytics. *Proceedings of the VLDB Endowment*, 15(3):713–726, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494150.

Lee:2021:LAV

[2862] Doris Jung-Lin Lee, Dixin Tang, Kunal Agarwal, Thyne Boonmark, Caitlyn Chen, Jake Kang, Ujjaini Mukhopadhyay, Jerry Song, Micah Yong, Marti A. Hearst, and Aditya G. Parameswaran. Lux: always-on visualization recommendations for exploratory dataframe workflows. *Proceedings of the VLDB Endowment*, 15(3):727–738, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494151.

Petersohn:2021:FRB

[2863] Devin Petersohn, Dixin Tang, Rehan Durrani, Areg Melik-Adamyan, Joseph E. Gonzalez, Anthony D. Joseph, and Aditya G. Parameswaran. Flexible rule-based decomposition and metadata independence in modin: a parallel dataframe system. *Proceedings of the VLDB Endowment*, 15(3): 739–751, November 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3494124.3494152.

Han:2021:CED

[2864] Yuxing Han, Ziniu Wu, Peizhi Wu, Rong Zhu, Jingyi Yang, Liang Wei Tan, Kai Zeng, Gao Cong, Yanzhao Qin, Andreas Pfadler, Zhengping Qian, Jingren Zhou, Jiangneng Li, and Bin Cui. Cardinality estimation in DBMS: a comprehensive benchmark evaluation. *Proceedings of the VLDB Endowment*, 15(4):752–765, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503586.

Zhang:2021:RRD

[2865] Qizhen Zhang, Philip A. Bernstein, Daniel S. Berger, and Badrish Chandramouli. Redy: remote dynamic memory cache. *Proceedings of the VLDB Endowment*, 15(4):766–779, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503587.

Boissier:2021:RBC

[2866] Martin Boissier. Robust and budget-constrained encoding configurations for in-memory database systems. *Proceedings of the VLDB Endowment*, 15(4): 780–793, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503588.

Tan:2021:FNR

[2867] Shulong Tan, Weijie Zhao, and Ping Li. Fast neural ranking on bipartite graph indices. *Proceedings of the VLDB Endowment*, 15(4):794–803, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503589.

Gan:2021:BSD

[2868] Shaoduo Gan, Jiawei Jiang, Binhang Yuan, Ce Zhang, Xiangru Lian, Rui Wang, Jianbin Chang, Chengjun Liu, Hongmei Shi, Shengzhuo Zhang, Xianghong Li, Tengxu Sun, Sen Yang, and Ji Liu. Bagua: scaling up distributed learning with system relaxations. *Proceedings of the VLDB Endowment*, 15(4):804–813, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503590.

Chan:2021:SCO

[2869] Tsz Nam Chan, Pak Lon Ip, Leong Hou U., Byron Choi, and Jianliang Xu. SWS: a complexity-optimized solution for spatial-temporal kernel density visualization. *Proceedings of the VLDB Endowment*, 15(4):814–827, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503591.

Liu:2021:PFA

[2870] Junxu Liu, Jian Lou, Li Xiong, Jinfei Liu, and Xiaofeng Meng. Projected federated averaging with heterogeneous differential privacy. *Proceedings of the*

VLDB Endowment, 15(4):828–840, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503592`.

Haimovich:2021:PPS

[2871] Daniel Haimovich, Dima Karamshuk, Thomas J. Leeper, Evgeniy Riabenko, and Milan Vojnovic. Popularity prediction for social media over arbitrary time horizons. *Proceedings of the VLDB Endowment*, 15(4):841–849, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503593`.

Doshi:2021:LWS

[2872] Ishita Doshi, Dhritiman Das, Ashish Bhutani, Rajeev Kumar, Rushi Bhatt, and Niranjan Balasubramanian. LANNS: a web-scale approximate nearest neighbor lookup system. *Proceedings of the VLDB Endowment*, 15(4):850–858, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503594`.

Pena:2021:FDD

[2873] Eduardo H. M. Pena, Eduardo C. de Almeida, and Felix Naumann. Fast detection of denial constraint violations. *Proceedings of the VLDB Endowment*, 15(4):859–871, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503595`.

Yu:2021:CFF

[2874] Bowen Yu, Guanyu Feng, Huanqi Cao, Xiaohan Li, Zhenbo Sun, Haojie Wang, Xiaowei Zhu, Weimin Zheng, and Wenguang Chen. Chukonu: a fully-featured high-performance big data framework that integrates a native compute engine into Spark. *Proceedings of the VLDB Endowment*, 15(4):872–885, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503596`.

Jin:2021:CNM

[2875] Sian Jin, Chengming Zhang, Xintong Jiang, Yunhe Feng, Hui Guan, Guanpeng Li, Shuaiwen Leon Song, and Dingwen Tao. COMET: a novel memory-efficient deep learning training framework by using error-bounded lossy compression. *Proceedings of the VLDB Endowment*, 15(4):886–899, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503597`.

Li:2021:FMF

[2876] Zitao Li, Bolin Ding, Ce Zhang, Ninghui Li, and Jingren Zhou. Federated matrix factorization with privacy guarantee. *Proceedings of the VLDB Endowment*, 15(4):900–913, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503598`.

Duong:2021:SRG

[2877] Chi Thang Duong, Trung Dung Hoang, Hongzhi Yin, Matthias Weidlich, Quoc Viet Hung Nguyen, and Karl Aberer. Scalable robust graph embedding with Spark. *Proceedings of the VLDB Endowment*, 15(4):914–922, December 2021. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3503585.3503599`.

Paul:2021:DWC

[2878] Debjyoti Paul, Jie Cao, Feifei Li, and Vivek Srikumar. Database workload characterization with query plan encoders. *Proceedings of the VLDB Endowment*, 15(4):923–935, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503600.

Modi:2021:NQO

[2879] Abhishek Modi, Kaushik Rajan, Srinivas Thimmaiah, Prakhar Jain, Swinky Mann, Ayushi Agarwal, Ajith Shetty, Shahid K. I., Ashit Gosalia, and Partho Sarthi. New query optimization techniques in the Spark engine of Azure synapse. *Proceedings of the VLDB Endowment*, 15(4):936–948, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503601.

Sinthong:2021:DDQ

[2880] Phanwadee Sinthong, Dhaval Patel, Nianjun Zhou, Shrey Shrivastava, Arun Iyengar, and Anuradha Bhamidipaty. DQDF: data-quality-aware dataframes. *Proceedings of the VLDB Endowment*, 15(4):949–957, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503602.

Agarwal:2021:RGC

[2881] Archita Agarwal, Marilyn George, Aaron Jeyaraj, and Malte Schwarzkopf. Retrofitting GDPR compliance onto legacy databases. *Proceedings of the VLDB Endowment*, 15(4):958–970, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503603.

Wu:2021:AAC

[2882] Xinle Wu, Dalin Zhang, Chenjuan Guo, Chaoyang He, Bin Yang, and Christian S. Jensen. AutoCTS: automated correlated time series forecasting. *Proceedings of the VLDB Endowment*, 15(4):971–983, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503604.

Sudhir:2021:RLM

[2883] Sivaprasad Sudhir, Michael Cafarella, and Samuel Madden. Replicated layout for in-memory database systems. *Proceedings of the VLDB Endowment*, 15(4):984–997, December 2021. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3503585.3503606.

Sanghi:2022:PCD

[2884] Anupam Sanghi, Shadab Ahmed, and Jayant R. Haritsa. Projection-compliant database generation. *Proceedings of the VLDB Endowment*, 15(5):998–1010, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510398.

Jin:2022:MRE

[2885] Guodong Jin and Semih Salihoglu. Making RDBMSs efficient on graph workloads through predefined joins. *Proceedings of the VLDB Endowment*, 15(5):1011–1023, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510400.

Deep:2022:REJ

[2886] Shaleen Deep, Xiao Hu, and Paraschos Koutris. Ranked enumeration of join queries with projections. *Proceedings of the VLDB Endowment*, 15(5):1024–1037, January 2022. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510401.

Shin:2022:HSC

[2887] Ahnjae Shin, Joo Seong Jeong, Do Yoon Kim, Soyoung Jung, and Byung-Gon Chun. Hippo: sharing computations in hyper-parameter optimization. *Proceedings of the VLDB Endowment*, 15(5):1038–1052, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510402.

Rinberg:2022:DJC

[2888] Arik Rinberg, Tomer Solomon, Roee Shlomo, Guy Khazma, Gal Lushi, Idit Keidar, and Paula Ta-Shma. DSON: JSON CRDT using delta-mutations for document stores. *Proceedings of the VLDB Endowment*, 15(5):1053–1065, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510403.

Zeighami:2022:NDD

[2889] Sepanta Zeighami, Ritesh Ahuja, Gabriel Ghinita, and Cyrus Shahabi. A neural database for differentially private spatial range queries. *Proceedings of the VLDB Endowment*, 15(5):1066–1078, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510404.

Maltry:2022:CAR

[2890] Marcel Maltry and Jens Dittrich. A critical analysis of recursive model indexes. *Proceedings of the VLDB Endowment*, 15(5):1079–1091, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510405.

Ge:2022:HBD

[2891] Zerui Ge, Dumitrel Loghin, Beng Chin Ooi, Pingcheng Ruan, and Tianwen Wang. Hybrid blockchain database systems: design and performance. *Proceedings of the VLDB Endowment*, 15(5):1092–1104, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510406.

Bonifati:2022:TQT

[2892] Angela Bonifati, Stefania Dumbrava, George Fletcher, Jan Hidders, Matthias Hofer, Wim Martens, Filip Murlak, Joshua Shinavier, Sławek Staworko, and Dominik Tomaszuk. Threshold queries in theory and in the wild. *Proceedings of the VLDB Endowment*, 15(5):1105–1118, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510407.

Sichert:2022:UDO

[2893] Moritz Sichert and Thomas Neumann. User-defined operators: efficiently integrating custom algorithms into modern databases. *Proceedings of the VLDB Endowment*, 15(5):1119–1131, January 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3510397.3510408.

Wang:2022:PEP

[2894] Yue Wang, Vivek Narasayya, Yeye He, and Surajit Chaudhuri. PACk: an efficient partition-based distributed agglomerative hierarchical clustering algorithm for deduplication. *Proceed-*

ings of the VLDB Endowment, 15(6): 1132–1145, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514062.

Chang:2022:NOA

[2895] Lijun Chang and Zhiyi Wang. A near-optimal approach to edge connectivity-based hierarchical graph decomposition. *Proceedings of the VLDB Endowment*, 15(6):1146–1158, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514063.

Tong:2022:HFE

[2896] Yongxin Tong, Xuchen Pan, Yuxiang Zeng, Yexuan Shi, Chunbo Xue, Zimu Zhou, Xiaofei Zhang, Lei Chen, Yi Xu, Ke Xu, and Weifeng Lv. Hu-Fu: efficient and secure spatial queries over data federation. *Proceedings of the VLDB Endowment*, 15(6): 1159–1172, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514064.

Fuchs:2022:SUT

[2897] Per Fuchs, Domagoj Margan, and Jana Giceva. Sortledton: a universal, transactional graph data structure. *Proceedings of the VLDB Endowment*, 15(6):1173–1186, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514065.

Zhang:2022:NLF

[2898] Bowen Zhang, Shengan Zheng, Zhenlin Qi, and Linpeng Huang. NBTree: a lock-free PM-friendly persistent B+-tree for eADR-enabled PM systems. *Proceedings of the VLDB Endowment*, 15(6):1187–1200, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514066.

Tuli:2022:TDT

[2899] Shreshth Tuli, Giuliano Casale, and Nicholas R. Jennings. TranAD: deep transformer networks for anomaly detection in multivariate time series data. *Proceedings of the VLDB Endowment*, 15(6):1201–1214, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514067.

Zhao:2022:SPO

[2900] Fuheng Zhao, Divyakant Agrawal, Amr El Abbadi, and Ahmed Metwally. SpaceSaving±: an optimal algorithm for frequency estimation and frequent items in the bounded-deletion model. *Proceedings of the VLDB Endowment*, 15(6):1215–1227, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514068. See errata [3591].

Zheng:2022:BEG

[2901] Chenguang Zheng, Hongzhi Chen, Yuxuan Cheng, Zhezheng Song, Yifan Wu, Changji Li, James Cheng, Hao Yang, and Shuai Zhang. ByteGNN: efficient graph neural network training at large scale. *Proceedings of the VLDB Endowment*, 15(6):1228–1242, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514069.

Jiang:2022:QDG

[2902] Yuli Jiang, Yu Rong, Hong Cheng, Xin Huang, Kangfei Zhao, and Junzhou Huang. Query driven-graph neural networks for community search: from non-attributed, attributed, to interactive attributed. *Proceedings of the VLDB Endowment*, 15(6):1243–1255, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514070.

Li:2022:HTT

[2903] Yang Li, Yu Shen, Huaijun Jiang, Wentao Zhang, Jixiang Li, Ji Liu, Ce Zhang, and Bin Cui. Hyper-tune: towards efficient hyper-parameter tuning at scale. *Proceedings of the VLDB Endowment*, 15(6):1256–1265, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514071.

Minartz:2022:MCD

[2904] Koen Minartz, Jens E. d'Hondt, and Odysseas Papapetrou. Multivariate correlations discovery in static and streaming data. *Proceedings of the VLDB Endowment*, 15(6):1266–1278, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514072.

Poppe:2022:MPA

[2905] Olga Poppe, Qun Guo, Willis Lang, Pankaj Arora, Morgan Oslake, Shize Xu, and Ajay Kalhan. Moneyball: proactive auto-scaling in Microsoft Azure SQL database serverless. *Proceedings of the VLDB Endowment*, 15(6):1279–1287, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514073.

Cheng:2022:PRP

[2906] Kewei Cheng, Xian Li, Yifan Ethan Xu, Xin Luna Dong, and Yizhou Sun. PGE: robust product graph embedding learning for error detection. *Proceedings of the VLDB Endowment*, 15(6):1288–1296, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514074.

Manne:2022:CMR

[2907] Naga Nithin Manne, Shilvi Satpati, Tanu Malik, Amitabha Bagchi, Ashish Gehani, and Amitabh Chaudhary. CHEX: multiversion replay with ordered checkpoints. *Proceedings of the VLDB Endowment*, 15(6):1297–1310, February 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3514061.3514075.

Even:2022:PFP

[2908] Tomer Even, Guy Even, and Adam Morrison. Prefix filter: practically and theoretically better than bloom. *Proceedings of the VLDB Endowment*, 15(7):1311–1323, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523211.

Yamada:2022:SDS

[2909] Hiroyuki Yamada and Jun Nemoto. Scalar DL: scalable and practical Byzantine fault detection for transactional database systems. *Proceedings of the VLDB Endowment*, 15 (7):1324–1336, March 2022. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523212.

Kim:2022:NLR

[2910] Gyuyeong Kim and Wonjun Lee. In-network leaderless replication for distributed data stores. *Proceedings of the VLDB Endowment*, 15(7):1337–1349, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523213.

Sun:2022:FAC

[2911] Xin Sun, Xin Huang, and Di Jin. Fast algorithms for core maximization on large graphs. *Proceedings of the VLDB Endowment*, 15(7):1350–1362, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523214.

Pan:2022:NSC

[2912] Shuye Pan, Peng Wang, Chen Wang, Wei Wang, and Jianmin Wang. NLC: search correlated window pairs on long time series. *Proceedings of the VLDB Endowment*, 15(7):1363–1375, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523215.

Wang:2022:EBL

[2913] Hanzhi Wang, Zhewei Wei, Junhao Gan, Ye Yuan, Xiaoyong Du, and Ji-Rong Wen. Edge-based local push for personalized PageRank. *Proceedings of the VLDB Endowment*, 15(7):1376–1389, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523216.

Chan:2022:CSD

[2914] Harry Kai-Ho Chan, Huan Li, Xiao Li, and Hua Lu. Continuous social distance monitoring in indoor space. *Proceedings of the VLDB Endowment*, 15(7):1390–1402, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523217.

Sun:2022:DSC

[2915] Xibo Sun, Shixuan Sun, Qiong Luo, and Bingsheng He. An in-depth study of continuous subgraph matching. *Proceedings of the VLDB Endowment*, 15 (7):1403–1416, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523218.

Mishra:2022:OST

[2916] Abhinav Mishra, Ram Sriharsha, and Sichen Zhong. OnlineSTL: scaling time series decomposition by 100×. *Proceedings of the VLDB Endowment*, 15 (7):1417–1425, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523219.

Li:2022:SSS

[2917] Haoyu Li, Qizhi Chen, Yixin Zhang, Tong Yang, and Bin Cui. Stingy sketch: a sketch framework for accurate and fast frequency estimation. *Proceedings of the VLDB Endowment*, 15(7):1426–1438, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523220.

Wang:2022:SDP

[2918] Yang Wang, Miao Yu, Yujie Hui, Fang Zhou, Yuyang Huang, Rui Zhu, Xueyuan Ren, Tianxi Li, and Xiaoyi Lu. A study of database performance sensitivity to experiment settings. *Proceedings of the VLDB Endowment*, 15(7):1439–1452, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523221.

Chao:2022:ITC

[2919] Zemin Chao, Hong Gao, Yinan An, and Jianzhong Li. The inherent time complexity and an efficient algorithm for subsequence matching problem. *Proceedings of the VLDB Endowment*, 15(7):1453–1465, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523222.

Chai:2022:SDA

[2920] Chengliang Chai, Jiabin Liu, Nan Tang, Guoliang Li, and Yuyu Luo. Selective data acquisition in the wild for model charging. *Proceedings of the VLDB Endowment*, 15(7):1466–1478, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523223.

Fan:2022:DAR

[2921] Wenfei Fan, Wenzhi Fu, Ruochun Jin, Ping Lu, and Chao Tian. Discovering association rules from big graphs. *Proceedings of the VLDB Endowment*, 15(7):1479–1492, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523224.

Han:2022:DEE

[2922] Xiaolin Han, Reynold Cheng, Chenhao Ma, and Tobias Grubenmann. DeepTEA: effective and efficient online time-dependent trajectory outlier detection. *Proceedings of the VLDB Endowment*, 15(7):1493–1505, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523225.

Simonini:2022:ERD

[2923] Giovanni Simonini, Luca Zecchini, Sonia Bergamaschi, and Felix Naumann. Entity resolution on-demand. *Proceedings of the VLDB Endowment*, 15(7):1506–1518, March 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3523210.3523226.

Alhazmi:2022:FBC

[2924] Afnan Alhazmi, Tom Blount, and George Konstantinidis. ForBackBench: a benchmark for chasing vs. query-rewriting. *Proceedings of the VLDB Endowment*, 15(8):1519–1532, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529338.

Chen:2022:ASB

[2925] Jeremy Chen, Yuqing Huang, Mushi Wang, Semih Salihoglu, and Ken Salem. Accurate summary-based cardinality estimation through the lens of cardinality estimation graphs. *Proceedings of the VLDB Endowment*, 15(8):1533–1545, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529339.

Liao:2022:DDC

[2926] Xuankun Liao, Qing Liu, Jiaxin Jiang, Xin Huang, Jianliang Xu, and Byron Choi. Distributed D-core decomposition over large directed graphs. *Proceedings of the VLDB Endowment*, 15(8):1546–1558, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529340.

Chen:2022:EMB

[2927] Lu Chen, Chengfei Liu, Rui Zhou, Jiajie Xu, and Jianxin Li. Efficient maximal biclique enumeration for large sparse bipartite graphs. *Proceedings of the VLDB Endowment*, 15 (8):1559–1571, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529341.

Zhou:2022:TGF

[2928] Hongkuan Zhou, Da Zheng, Israt Nisa, Vasileios Ioannidis, Xiang Song, and George Karypis. TGL: a general framework for temporal GNN training on billion-scale graphs. *Proceedings of the VLDB Endowment*, 15(8):1572–1580, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529342.

Yuan:2022:DLF

[2929] Binhang Yuan, Cameron R. Wolfe, Chen Dun, Yuxin Tang, Anastasios Kyrillidis, and Chris Jermaine. Distributed learning of fully connected neural networks using independent subnet training. *Proceedings of the VLDB Endowment*, 15(8):1581–1590, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529343.

Burckhardt:2022:NEE

[2930] Sebastian Burckhardt, Badrish Chandramouli, Chris Gillum, David Justo, Konstantinos Kallas, Connor McMahon, Christopher S. Meiklejohn, and Xiangfeng Zhu. Netherite: efficient execution of serverless workflows. *Proceedings of the VLDB Endowment*, 15(8):1591–1604, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529344.

Huynh:2022:ERT

[2931] Andy Huynh, Harshal A. Chaudhari, Evimaria Terzi, and Manos Athanassoulis. Endure: a robust tuning paradigm for LSM trees under workload uncertainty. *Proceedings of the VLDB Endowment*, 15(8):1605–1618, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529345.

Li:2022:EDB

[2932] Hongzheng Li, Yingxia Shao, Junping Du, Bin Cui, and Lei Chen. An I/O-efficient disk-based graph system for scalable second-order random walk of large graphs. *Proceedings of the VLDB Endowment*, 15(8):1619–1631, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529346.

Vaidya:2022:SLE

[2933] Kapil Vaidya, Subarna Chatterjee, Eric Knorr, Michael Mitzenmacher, Stratos Idreos, and Tim Kraska. SNARF: a learning-enhanced range filter. *Proceedings of the VLDB Endowment*, 15

(8):1632–1644, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529347.

Chen:2022:DEI

[2934] Xin Chen, You Peng, Sibo Wang, and Jeffrey Xu Yu. DLCR: efficient indexing for label-constrained reachability queries on large dynamic graphs. *Proceedings of the VLDB Endowment*, 15(8):1645–1657, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529348.

Zhao:2022:QTT

[2935] Yue Zhao, Gao Cong, Jiachen Shi, and Chunyan Miao. QueryFormer: a tree transformer model for query plan representation. *Proceedings of the VLDB Endowment*, 15(8):1658–1670, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529349.

Lee:2022:ICI

[2936] Leon Lee, Siphrey Xie, Yunus Ma, and Shimin Chen. Index checkpoints for instant recovery in in-memory database systems. *Proceedings of the VLDB Endowment*, 15(8):1671–1683, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529350.

Esmailoghli:2022:MMA

[2937] Mahdi Esmailoghli, Jorge-Arnulfo Quiané-Ruiz, and Ziawasch Abedjan. MATE: multi-attribute table extraction. *Proceedings of the VLDB Endowment*, 15(8):1684–1696, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529353.

Paparrizos:2022:TUE

[2938] John Paparrizos, Yuhao Kang, Paul Boniol, Ruey S. Tsay, Themis Palpanas, and Michael J. Franklin. TSB-UAD: an end-to-end benchmark suite for univariate time-series anomaly detection. *Proceedings of the VLDB Endowment*, 15(8):1697–1711, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529354.

Leone:2022:CRE

[2939] Manuel Leone, Stefano Huber, Akhil Arora, Alberto García-Durán, and Robert West. A critical re-evaluation of neural methods for entity alignment. *Proceedings of the VLDB Endowment*, 15(8):1712–1725, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529355.

Paganelli:2022:AHB

[2940] Matteo Paganelli, Francesco Del Buono, Andrea Baraldi, and Francesco Guerra. Analyzing how BERT performs entity matching. *Proceedings of the VLDB Endowment*, 15(8):1726–1738, April 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3529337.3529356.

Arun:2022:SBF

[2941] Balaji Arun and Binoy Ravindran. Scalable Byzantine fault tolerance via partial decentralization. *Proceedings of the VLDB Endowment*, 15(9):1739–1752, May 2022. CODEN

???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538599.

Li:2022:EEB

[2942] Huan Li, Lanjing Yi, Bo Tang, Hua Lu, and Christian S. Jensen. Efficient and error-bounded spatiotemporal quantile monitoring in edge computing environments. *Proceedings of the VLDB Endowment*, 15(9):1753–1765, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538600.

Kato:2022:HDP

[2943] Fumiyuki Kato, Tsubasa Takahashi, Shun Takagi, Yang Cao, Seng Pei Liew, and Masatoshi Yoshikawa. HDPView: differentially private materialized view for exploring high dimensional relational data. *Proceedings of the VLDB Endowment*, 15(9):1766–1778, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538601.

Schmidl:2022:ADT

[2944] Sebastian Schmidl, Phillip Wenig, and Thorsten Papenbrock. Anomaly detection in time series: a comprehensive evaluation. *Proceedings of the VLDB Endowment*, 15(9):1779–1797, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538602.

Youngmann:2022:GED

[2945] Brit Youngmann, Sihem Amer-Yahia, and Aurelien Personnaz. Guided exploration of data summaries. *Proceedings of the VLDB Endowment*, 15(9):1798–1807, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538603.

Zhang:2022:FDT

[2946] Xinyi Zhang, Zhuo Chang, Yang Li, Hong Wu, Jian Tan, Feifei Li, and Bin Cui. Facilitating database tuning with hyper-parameter optimization: a comprehensive experimental evaluation. *Proceedings of the VLDB Endowment*, 15(9):1808–1821, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538604.

Wang:2022:ESV

[2947] Zuan Wang, Xiaofeng Ding, Hai Jin, and Pan Zhou. Efficient secure and verifiable location-based skyline queries over encrypted data. *Proceedings of the VLDB Endowment*, 15(9):1822–1834, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538605.

Zhao:2022:TIC

[2948] Zhuoyue Zhao, Dong Xie, and Feifei Li. AB-tree: index for concurrent random sampling and updates. *Proceedings of the VLDB Endowment*, 15(9):1835–1847, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538606.

Fang:2022:RTR

[2949] Chenguang Fang, Shaoxu Song, and Yinan Mei. On repairing timestamps for regular interval time series. *Proceedings of the VLDB Endowment*, 15(9):1848–1860, May 2022. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3538598.3538607.

Fan:2022:TEP

[2950] Wenfei Fan, Ruochun Jin, Ping Lu, Chao Tian, and Ruiqi Xu. Towards event prediction in temporal graphs. *Proceedings of the VLDB Endowment*, 15(9):1861–1874, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538608.

Liang:2022:DCH

[2951] Yihuai Liang, Yan Li, and Byeong-Seok Shin. Decentralized crowdsourcing for human intelligence tasks with efficient on-chain cost. *Proceedings of the VLDB Endowment*, 15(9):1875–1888, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538609.

Wang:2022:TDB

[2952] Yue Wang, Ruiqi Xu, Xun Jian, Alexander Zhou, and Lei Chen. Towards distributed bitruss decomposition on bipartite graphs. *Proceedings of the VLDB Endowment*, 15(9):1889–1901, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538610.

Gagliardelli:2022:GSM

[2953] Luca Gagliardelli, George Papadakis, Giovanni Simonini, Sonia Bergamaschi, and Themis Palpanas. Generalized supervised meta-blocking. *Proceedings of the VLDB Endowment*, 15(9):1902–1910, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538611.

An:2022:YRO

[2954] Mijin An, Soojun Im, Dawoon Jung, and Sang-Won Lee. Your read is our priority in flash storage. *Proceedings of the VLDB Endowment*, 15(9):1911–1923, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538612.

Bhattacharya:2022:NWO

[2955] Arindam Bhattacharya, Chathur Gudesa, Amitabha Bagchi, and Srikanta Bedathur. New wine in an old bottle: data-aware hash functions for Bloom filters. *Proceedings of the VLDB Endowment*, 15(9):1924–1936, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538613.

Peng:2022:SEA

[2956] Jingshu Peng, Zhao Chen, Yingxia Shao, Yanyan Shen, Lei Chen, and Jiannong Cao. Sancus: staleness-aware communication-avoiding full-graph decentralized training in large-scale graph neural networks. *Proceedings of the VLDB Endowment*, 15(9):1937–1950, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538614.

Bucchi:2022:CCE

[2957] Marco Bucchi, Alejandro Grez, Andrés Quintana, Cristian Riveros, and Stijn Vansummeren. CORE: a complex event recognition engine. *Proceedings of the VLDB Endowment*, 15(9):1951–1964, May 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3538598.3538615.

Cheng:2022:TEE

[2958] Audrey Cheng, Xiao Shi, Aaron Kabcenell, Shilpa Lawande, Hamza Qadeer, Jason Chan, Harrison Tin, Ryan Zhao, Peter Bailis, Mahesh Balakrishnan, Nathan Bronson, Natacha Crooks, and Ion Stoica. TAOBench: an end-to-end benchmark for social network workloads. *Proceedings of the VLDB Endowment*, 15(9):1965–1977, May 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3538598.3538616`.

Kakaraparthy:2022:VHA

[2959] Aarati Kakaraparthy, Jignesh M. Patel, Brian P. Kroth, and Kwanghyun Park. VIP hashing: adapting to skew in popularity of data on the fly. *Proceedings of the VLDB Endowment*, 15 (10):1978–1990, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547306`.

Vincon:2022:NDP

[2960] Tobias Vinçon, Christian Knödler, Leonardo Solis-Vasquez, Arthur Bernhardt, Sajjad Tamimi, Lukas Weber, Florian Stock, Andreas Koch, and Ilia Petrov. Near-data processing in database systems on native computational storage under HTAP workloads. *Proceedings of the VLDB Endowment*, 15(10):1991–2004, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547307`.

Echihabi:2022:HAD

[2961] Karima Echihabi, Panagiota Fatourou, Kostas Zoumpatianos, Themis Palpanas, and Houda Benbrahim. Hercules against data series similarity search. *Proceedings of the VLDB Endowment*, 15(10):2005–2018, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547308`.

Siddiqui:2022:DLO

[2962] Tarique Siddiqui, Wentao Wu, Vivek Narasayya, and Surajit Chaudhuri. DISTILL: low-overhead data-driven techniques for filtering and costing indexes for scalable index tuning. *Proceedings of the VLDB Endowment*, 15 (10):2019–2031, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547309`.

Yang:2022:OML

[2963] Zhihui Yang, Zuozhi Wang, Yicong Huang, Yao Lu, Chen Li, and X. Sean Wang. Optimizing machine learning inference queries with correlative proxy models. *Proceedings of the VLDB Endowment*, 15(10):2032–2044, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547310`.

Su:2022:BSD

[2964] Li Su, Xiaoming Qin, Zichao Zhang, Rui Yang, Le Xu, Indranil Gupta, Wenyuan Yu, Kai Zeng, and Jingren Zhou. Banyan: a scoped dataflow engine for graph query service. *Proceedings of the VLDB Endowment*, 15(10):2045–2057, June 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3547305.3547311`.

Huang:2022:FEU

[2965] Ziyue Huang, Yuan Qiu, Ke Yi, and Graham Cormode. Frequency estimation under multiparty differential privacy: one-shot and streaming. *Proceedings of the VLDB Endowment*, 15 (10):2058–2070, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547312.

Ali:2022:OIS

[2966] Ahsan Ali, Riccardo Pinciroli, Feng Yan, and Evgenia Smirni. Optimizing inference serving on serverless platforms. *Proceedings of the VLDB Endowment*, 15(10):2071–2084, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547313.

Alkowaileet:2022:CFS

[2967] Wail Y. Alkowaileet and Michael J. Carey. Columnar formats for schemaless LSM-based document stores. *Proceedings of the VLDB Endowment*, 15 (10):2085–2097, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547314.

Qiu:2022:ESP

[2968] Yu-Xuan Qiu, Dong Wen, Lu Qin, Wentao Li, Rong-Hua Li, and Ying Zhang. Efficient shortest path counting on large road networks. *Proceedings of the VLDB Endowment*, 15 (10):2098–2110, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547315.

Fu:2022:TCE

[2969] Fangcheng Fu, Xupeng Miao, Jiawei Jiang, Huanran Xue, and Bin Cui. Towards communication-efficient vertical federated learning training via cache-enabled local updates. *Proceedings of the VLDB Endowment*, 15 (10):2111–2120, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547316.

Zhu:2022:DED

[2970] Yifan Zhu, Lu Chen, Yunjun Gao, Baihua Zheng, and Pengfei Wang. DESIRE: an efficient dynamic cluster-based forest indexing for similarity search in multi-metric spaces. *Proceedings of the VLDB Endowment*, 15 (10):2121–2133, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547317.

Kim:2022:AAB

[2971] Junghoon Kim, Kaiyu Feng, Gao Cong, Diwen Zhu, Wenyuan Yu, and Chunyan Miao. ABC: attributed bipartite co-clustering. *Proceedings of the VLDB Endowment*, 15(10):2134–2147, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547318.

Xiao:2022:TSD

[2972] Jinzhao Xiao, Yuxiang Huang, Changyu Hu, Shaoxu Song, Xiangdong Huang, and Jianmin Wang. Time series data encoding for efficient storage: a comparative analysis in Apache IoTDB. *Proceedings of the VLDB Endowment*, 15(10):2148–2160, June 2022. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3547305.3547319.

Zhang:2022:SLO

[2973] Teng Zhang, Jian Tan, Xin Cai, Jianying Wang, Feifei Li, and Jianling Sun. SA-LSM: optimize data layout for LSM-tree based storage using survival analysis. *Proceedings of the VLDB Endowment*, 15(10):2161–2174, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547320.

Ferragina:2022:IMV

[2974] Paolo Ferragina, Giovanni Manzini, Travis Gagie, Dominik Köppl, Gonzalo Navarro, Manuel Striani, and Francesco Tosoni. Improving matrix-vector multiplication via lossless grammar-compressed matrices. *Proceedings of the VLDB Endowment*, 15 (10):2175–2187, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547321.

Wu:2022:NRL

[2975] Shangyu Wu, Yufei Cui, Jinghuan Yu, Xuan Sun, Tei-Wei Kuo, and Chun Jason Xue. NFL: robust learned index via distribution transformation. *Proceedings of the VLDB Endowment*, 15(10):2188–2200, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547322.

Zare:2022:LLG

[2976] Hamidreza Zare, Viveck Ramesh Cadambe, Bhuvan Urgaonkar, Nader Alfares, Praneet Soni, Chetan Sharma, and Arif A. Merchant. LEGOStore: a linearizable geo-distributed store combining replication and erasure coding. *Proceedings of the VLDB Endowment*, 15(10):2201–2215, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547323.

Simpson:2022:MMU

[2977] Michael Simpson, Farnoosh Hashemi, and Laks V. S. Lakshmanan. Misinformation mitigation under differential propagation rates and temporal penalties. *Proceedings of the VLDB Endowment*, 15(10):2216–2229, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547324.

Zhou:2022:SDL

[2978] Lixi Zhou, Jiaqing Chen, Amitabh Das, Hong Min, Lei Yu, Ming Zhao, and Jia Zou. Serving deep learning models with deduplication from relational databases. *Proceedings of the VLDB Endowment*, 15(10):2230–2243, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547325.

Huang:2022:DOI

[2979] Zichun Huang and Shimin Chen. Density-optimized intersection-free mapping and matrix multiplication for join-project operations. *Proceedings of the VLDB Endowment*, 15 (10):2244–2256, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547326.

Jahangiri:2022:DTO

[2980] Shiva Jahangiri, Michael J. Carey, and Johann-Christoph Freytag. Design trade-offs for a robust dynamic hybrid hash join. *Proceedings of the VLDB Endowment*, 15(10):2257–2269, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547327.

Foufoulas:2022:YYE

[2981] Yannis Foufoulas, Alkis Simitsis, Lefteris Stamatogiannakis, and Yannis Ioannidis. YeSQL: "you extend SQL" with rich and highly performant user-defined functions in relational databases. *Proceedings of the VLDB Endowment*, 15(10):2270–2283, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547328.

Ahmetaj:2022:MSS

[2982] Shqiponja Ahmetaj, Bianca Löhnert, Magdalena Ortiz, and Mantas Simkus. Magic shapes for SHACL validation. *Proceedings of the VLDB Endowment*, 15(10):2284–2296, June 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3547305.3547329.

Merchant:2022:SGR

[2983] Arpit Merchant, Aristides Gionis, and Michael Mathioudakis. Succinct graph representations as distance oracles: an experimental evaluation. *Proceedings of the VLDB Endowment*, 15(11):2297–2306, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551794.

Jiang:2022:ECS

[2984] Yangqin Jiang, Yixiang Fang, Chenhao Ma, Xin Cao, and Chunshan Li. Effective community search over large star-schema heterogeneous information networks. *Proceedings of the VLDB Endowment*, 15(11):2307–2320, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551795.

Ting:2022:NDT

[2985] Kai Ming Ting, Zongyou Liu, Hang Zhang, and Ye Zhu. A new distributional treatment for time series and an anomaly detection investigation. *Proceedings of the VLDB Endowment*, 15(11):2321–2333, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551796.

Denham:2022:WUL

[2986] Benjamin Denham, Edmund M-K. Lai, Roopak Sinha, and M. Asif Naeem. Witan: unsupervised labelling function generation for assisted data programming. *Proceedings of the VLDB Endowment*, 15(11):2334–2347, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551797.

Bao:2022:SMM

[2987] Ergute Bao, Yizheng Zhu, Xiaokui Xiao, Yin Yang, Beng Chin Ooi, Benjamin Hong Meng Tan, and Khin Mi Mi Aung. Skellam mixture mechanism: a novel approach to federated learning with differential privacy. *Proceedings of the VLDB Endowment*, 15(11):2348–2360, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551798.

Hilprecht:2022:ZSC

[2988] Benjamin Hilprecht and Carsten Binnig. Zero-shot cost models for out-of-the-box learned cost prediction. *Proceedings of the VLDB Endowment*, 15(11):2361–2374, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551799.

Choi:2022:WMG

[2989] Dalsu Choi, Hyunsik Yoon, Hyubjin Lee, and Yon Dohn Chung. Waffle: in-memory grid index for moving objects with reinforcement learning-based configuration tuning system. *Proceedings of the VLDB Endowment*, 15 (11):2375–2388, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551800.

Jungmair:2022:DOF

[2990] Michael Jungmair, André Kohn, and Jana Giceva. Designing an open framework for query optimization and compilation. *Proceedings of the VLDB Endowment*, 15(11):2389–2401, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551801.

Nguyen:2022:PST

[2991] Lam-Duy Nguyen, Sang-Won Lee, and Beomseok Nam. In-page shadowing and two-version timestamp ordering for mobile DBMSs. *Proceedings of the VLDB Endowment*, 15(11):2402–2414, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551802.

Sun:2022:REA

[2992] Shixuan Sun, Xibo Sun, Bingsheng He, and Qiong Luo. RapidFlow: an efficient approach to continuous subgraph matching. *Proceedings of the VLDB Endowment*, 15(11):2415–2427, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551803.

Helali:2022:SAA

[2993] Mossad Helali, Essam Mansour, Ibrahim Abdelaziz, Julian Dolby, and Kavitha Srinivas. A scalable AutoML approach based on graph neural networks. *Proceedings of the VLDB Endowment*, 15(11):2428–2436, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551804.

Pappachan:2022:DTT

[2994] Primal Pappachan, Shufan Zhang, Xi He, and Sharad Mehrotra. Don't be a tattle-tale: preventing leakages through data dependencies on access control protected data. *Proceedings of the VLDB Endowment*, 15 (11):2437–2449, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551805.

Xu:2022:ELB

[2995] Qingyu Xu, Feng Zhang, Zhiming Yao, Lv Lu, Xiaoyong Du, Dong Deng, and Bingsheng He. Efficient load-balanced butterfly counting on GPU. *Proceedings of the VLDB Endowment*, 15(11):2450–2462, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551806.

Benson:2022:PBB

[2996] Lawrence Benson, Leon Papke, and Tilmann Rabl. PerMA-bench: benchmarking persistent memory access. *Proceedings of the VLDB Endowment*, 15(11):2463–2476, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551807.

He:2022:EPM

[2997] Yuliang He, Duo Lu, Kaisong Huang, and Tianzheng Wang. Evaluating persistent memory range indexes: part two. *Proceedings of the VLDB Endowment*, 15(11):2477–2490, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551808.

Yogatama:2022:ODP

[2998] Bobbi W. Yogatama, Weiwei Gong, and Xiangyao Yu. Orchestrating data placement and query execution in heterogeneous CPU-GPU DBMS. *Proceedings of the VLDB Endowment*, 15 (11):2491–2503, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551809.

Wang:2022:IMO

[2999] Weicheng Wang and Raymond Chi-Wing Wong. Interactive mining with ordered and unordered attributes. *Proceedings of the VLDB Endowment*, 15 (11):2504–2516, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551810.

Yang:2022:FDS

[3000] Wenzhe Yang, Sheng Wang, Yuan Sun, and Zhiyong Peng. Fast dataset search with earth mover's distance. *Proceedings of the VLDB Endowment*, 15 (11):2517–2529, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551811.

Pereira:2022:AST

[3001] João L. M. Pereira, João Casanova, Helena Galhardas, and Dennis Shasha. AcX: system, techniques, and experiments for acronym expansion. *Proceedings of the VLDB Endowment*, 15 (11):2530–2544, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551812.

Chen:2022:GTH

[3002] Hongzhi Chen, Changji Li, Chenguang Zheng, Chenghuan Huang, Juncheng Fang, James Cheng, and Jian Zhang. G-tran: a high performance distributed graph database with a decentralized architecture. *Proceedings of the VLDB Endowment*, 15(11):2545–2558, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551813.

Konig:2022:TPS

[3003] Arnd Christian König, Yi Shan, Tobias Ziegler, Aarati Kakaraparthy, Willis Lang, Justin Moeller, Ajay Kalhan, and Vivek Narasayya. Tenant placement in over-subscribed database-as-a-service clusters. *Proceedings of the VLDB Endowment*, 15(11):2559–2571, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551814.

Chen:2022:EBS

[3004] Yue Chen, Kaiyu Feng, Gao Cong, and Han Mao Kiah. Example-based spatial pattern matching. *Proceedings of the VLDB Endowment*, 15(11):2572–2584, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551815.

Peng:2022:NFP

[3005] Zeshun Peng, Yanfeng Zhang, Qian Xu, Haixu Liu, Yuxiao Gao, Xiaohua Li, and Ge Yu. NeuChain: a fast permissioned blockchain system with deterministic ordering. *Proceedings of the VLDB Endowment*, 15(11):2585–2598, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551816.

McKenna:2022:AAI

[3006] Ryan McKenna, Brett Mullins, Daniel Sheldon, and Gerome Miklau. AIM: an adaptive and iterative mechanism for differentially private synthetic data. *Proceedings of the VLDB Endowment*, 15(11):2599–2612, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551817.

Toussaint:2022:TNV

[3007] Etienne Toussaint, Paolo Guagliardo, Leonid Libkin, and Juan Sequeda. Troubles with nulls, views from the users. *Proceedings of the VLDB Endowment*, 15(11):2613–2625, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551818.

Park:2022:GSE

[3008] Yeonhong Park, Sunhong Min, and Jae W. Lee. Ginex: SSD-enabled billion-scale graph neural network training on a single machine via provably optimal in-memory caching. *Proceedings of the VLDB Endowment*, 15(11):2626–2639, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551819.

Zhang:2022:SPQ

[3009] Junhua Zhang, Wentao Li, Long Yuan, Lu Qin, Ying Zhang, and Lijun Chang. Shortest-path queries on complex networks: experiments, analyses, and improvement. *Proceedings of the VLDB Endowment*, 15(11):2640–2652, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551820.

Ghayyur:2022:MAA

[3010] Sameera Ghayyur, Dhrubajyoti Ghosh, Xi He, and Sharad Mehrotra. MIDE: accuracy aware minimally invasive data exploration for decision support. *Proceedings of the VLDB Endowment*, 15(11):2653–2665, July 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3551793.3551821.

Ghosh:2022:JJT

[3011] Dhrubajyoti Ghosh, Peeyush Gupta, Sharad Mehrotra, Roberto Yus, and Yasser Altowim. JENNER: just-in-time enrichment in query processing. *Proceedings of the VLDB Endowment*, 15(11):2666–2678, July 2022. CODEN ???? ISSN 2150-

8097. URL `https://dl.acm.org/doi/10.14778/3551793.3551822`.

Zhang:2022:CCA

[3012] Jiaoyi Zhang and Yihan Gao. CARMI: a cache-aware learned index with a cost-based construction algorithm. *Proceedings of the VLDB Endowment*, 15(11):2679–2691, July 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3551793.3551823`.

Swift:2022:MFC

[3013] Ian P. Swift, Sana Ebrahimi, Azade Nova, and Abolfazl Asudeh. Maximizing fair content spread via edge suggestion in social networks. *Proceedings of the VLDB Endowment*, 15(11):2692–2705, July 2022. CODEN ???? ISSN 2150-8097.

Hertzschuch:2022:TCS

[3014] Axel Hertzschuch, Claudio Hartmann, Dirk Habich, and Wolfgang Lehner. Turbo-charging SPJ query plans with learned physical join operator selections. *Proceedings of the VLDB Endowment*, 15(11):2706–2718, July 2022. CODEN ???? ISSN 2150-8097.

Ma:2022:FLD

[3015] Chenhao Ma, Reynold Cheng, Laks V. S. Lakshmanan, and Xiaolin Han. Finding locally densest subgraphs: a convex programming approach. *Proceedings of the VLDB Endowment*, 15 (11):2719–2732, July 2022. CODEN ???? ISSN 2150-8097.

Shao:2022:DDS

[3016] Zezhi Shao, Zhao Zhang, Wei Wei, Fei Wang, Yongjun Xu, Xin Cao, and Christian S. Jensen. Decoupled dynamic spatial-temporal graph neural network for traffic forecasting. *Proceedings of the VLDB Endowment*, 15(11): 2733–2746, July 2022. CODEN ???? ISSN 2150-8097.

Li:2022:HOH

[3017] Youjie Li, Amar Phanishayee, Derek Murray, Jakub Tarnawski, and Nam Sung Kim. Harmony: overcoming the hurdles of GPU memory capacity to train massive DNN models on commodity servers. *Proceedings of the VLDB Endowment*, 15(11):2747–2760, July 2022. CODEN ???? ISSN 2150-8097.

Luo:2022:SVD

[3018] Xuan Luo, Jian Pei, Zicun Cong, and Cheng Xu. On Shapley value in data assemblage under independent utility. *Proceedings of the VLDB Endowment*, 15(11):2761–2773, July 2022. CODEN ???? ISSN 2150-8097.

Paparrizos:2022:VUS

[3019] John Paparrizos, Paul Boniol, Themis Palpanas, Ruey S. Tsay, Aaron Elmore, and Michael J. Franklin. Volume under the surface: a new accuracy evaluation measure for time-series anomaly detection. *Proceedings of the VLDB Endowment*, 15(11):2774–2787, July 2022. CODEN ???? ISSN 2150-8097.

Yin:2022:ASC

[3020] Haoteng Yin, Muhan Zhang, Yanbang Wang, Jianguo Wang, and Pan Li. Algorithm and system co-design for efficient subgraph-based graph representation learning. *Proceedings of the VLDB Endowment*, 15(11):2788–2796, July 2022. CODEN ???? ISSN 2150-8097.

Freitag:2022:MOM

[3021] Michael Freitag, Alfons Kemper, and Thomas Neumann. Memory-optimized multi-version concurrency control for disk-based database systems. *Proceedings of the VLDB Endowment*, 15(11): 2797–2810, July 2022. CODEN ???? ISSN 2150-8097.

He:2022:QPT

[3022] Dong He, Supun C. Nakandala, Dalitso Banda, Rathijit Sen, Karla Saur, Kwanghyun Park, Carlo Curino, Jesús Camacho-Rodríguez, Konstantinos Karanasos, and Matteo Interlandi. Query processing on tensor computation runtimes. *Proceedings of the VLDB Endowment*, 15(11):2811–2825, July 2022. CODEN ???? ISSN 2150-8097.

Tang:2022:RCS

[3023] Yifu Tang, Jianxin Li, Nur Al Hasan Haldar, Ziyu Guan, Jiajie Xu, and Chengfei Liu. Reliable community search in dynamic networks. *Proceedings of the VLDB Endowment*, 15(11): 2826–2838, July 2022. CODEN ???? ISSN 2150-8097.

Amiri:2022:QSM

[3024] Mohammad Javad Amiri, Boon Thau Loo, Divyakant Agrawal, and Amr El Abbadi. Qanaat: a scalable multi-enterprise permissioned blockchain system with confidentiality guarantees. *Proceedings of the VLDB Endowment*, 15(11):2839–2852, July 2022. CODEN ???? ISSN 2150-8097.

Chan:2022:FNF

[3025] Tsz Nam Chan, Leong Hou U., Yun Peng, Byron Choi, and Jianliang Xu. Fast network k-function-based spatial analysis. *Proceedings of the VLDB Endowment*, 15(11):2853–2866, July 2022. CODEN ???? ISSN 2150-8097.

Lasch:2022:CMO

[3026] Robert Lasch, Thomas Legler, Norman May, Bernhard Scheirle, and Kai-Uwe Sattler. Cost modelling for optimal data placement in heterogeneous main memory. *Proceedings of the VLDB Endowment*, 15(11):2867–2880, July 2022. CODEN ???? ISSN 2150-8097.

Li:2022:SSN

[3027] Junru Li, Youyou Lu, Yiming Zhang, Qing Wang, Zhuo Cheng, Keji Huang, and Jiwu Shu. SwitchTx: scalable in-network coordination for distributed transaction processing. *Proceedings of the VLDB Endowment*, 15(11):2881–2894, July 2022. CODEN ???? ISSN 2150-8097.

Vogel:2022:PWO

[3028] Lukas Vogel, Alexander van Renen, Satoshi Imamura, Jana Giceva, Thomas Neumann, and Alfons Kemper. Plush: a write-optimized persistent log-structured hash-table. *Proceedings of the VLDB Endowment*, 15 (11):2895–2907, July 2022. CODEN ???? ISSN 2150-8097.

Zhang:2022:EID

[3029] Fangyuan Zhang and Sibo Wang. Effective indexing for dynamic structural graph clustering. *Proceedings of the VLDB Endowment*, 15(11):2908–2920, July 2022. CODEN ???? ISSN 2150-8097.

Trummer:2022:CSC

[3030] Immanuel Trummer. CodexDB: synthesizing code for query processing from natural language instructions using GPT-3 codex. *Proceedings of the VLDB Endowment*, 15(11):2921–2928, July 2022. CODEN ???? ISSN 2150-8097.

Phani:2022:UPS

[3031] Arnab Phani, Lukas Erlbacher, and Matthias Boehm. UPLIFT: parallelization strategies for feature transformations in machine learning workloads. *Proceedings of the VLDB Endowment*, 15(11):2929–2938, July 2022. CODEN ???? ISSN 2150-8097.

Zhou:2022:LSM

[3032] Xinjing Zhou, Xiangyao Yu, Goetz Graefe, and Michael Stonebraker. Lotus: scalable multi-partition transactions on single-threaded partitioned databases. *Proceedings of the VLDB Endowment*, 15(11):2939–2952, July 2022. CODEN ???? ISSN 2150-8097.

Kanellis:2022:LSE

[3033] Konstantinos Kanellis, Cong Ding, Brian Kroth, Andreas Müller, Carlo Curino, and Shivaram Venkataraman. LlamaTune: sample-efficient DBMS configuration tuning. *Proceedings of the VLDB Endowment*, 15(11):2953–2965, July 2022. CODEN ???? ISSN 2150-8097.

Winter:2022:DSS

[3034] Christian Winter, Jana Giceva, Thomas Neumann, and Alfons Kemper. On-demand state separation for cloud data warehousing. *Proceedings of the VLDB Endowment*, 15(11):2966–2979, July 2022. CODEN ???? ISSN 2150-8097.

Trummer:2022:BBB

[3035] Immanuel Trummer. BABOONS: black-box optimization of data summaries in natural language. *Proceedings of the VLDB Endowment*, 15(11):2980–2993, July 2022. CODEN ???? ISSN 2150-8097.

Wang:2022:CAD

[3036] Xiaoying Wang, Weiyuan Wu, Jinze Wu, Yizhou Chen, Nick Zrymiak, Changbo Qu, Lampros Flokas, George Chow, Jiannan Wang, Tianzheng Wang, Eugene Wu, and Qingqing Zhou. ConnectorX: accelerating data loading from databases to dataframes. *Proceedings of the VLDB Endowment*, 15(11):2994–3003, July 2022. CODEN ???? ISSN 2150-8097.

Wongkham:2022:ULI

[3037] Chaichon Wongkham, Baotong Lu, Chris Liu, Zhicong Zhong, Eric Lo, and Tianzheng Wang. Are updatable learned indexes ready? *Proceedings of the VLDB Endowment*, 15(11):3004–3017, July 2022. CODEN ???? ISSN 2150-8097.

Reif:2022:SGA

[3038] Maximilian Reif and Thomas Neumann. A scalable and generic approach to range joins. *Proceedings of the VLDB Endowment*, 15(11):3018–3030, July 2022. CODEN ???? ISSN 2150-8097.

Hohma:2022:SSC

[3039] Ellen Hohma, Christian M. M. Frey, Anna Beer, and Thomas Seidl. SCAR: spectral clustering accelerated and robustified. *Proceedings of the VLDB Endowment*, 15(11):3031–3044, July 2022. CODEN ???? ISSN 2150-8097.

Benedikt:2022:RIC

[3040] Michael Benedikt, Maxime Buron, Stefano Germano, Kevin Kappelmann, and Boris Motik. Rewriting the infinite chase. *Proceedings of the VLDB Endowment*, 15(11):3045–3057, July 2022. CODEN ???? ISSN 2150-8097.

Liakos:2022:CEL

[3041] Panagiotis Liakos, Katia Papakonstantinopoulou, and Yannis Kotidis. Chimp: efficient lossless floating point compression for time series databases. *Proceedings of the VLDB Endowment*, 15(11):3058–3070, July 2022. CODEN ???? ISSN 2150-8097.

Dayan:2022:SGL

[3042] Niv Dayan, Tamar Weiss, Shmuel Dashevsky, Michael Pan, Edward Bortnikov, and Moshe Twitto. Spooky: granulating LSM-tree compactions correctly. *Proceedings of the VLDB Endowment*, 15(11):3071–3084, July 2022. CODEN ???? ISSN 2150-8097.

Yao:2022:ISB

[3043] Kai Yao, Lijun Chang, and Jeffrey Xu Yu. Identifying similar-bicliques in bipartite graphs. *Proceedings of the VLDB Endowment*, 15(11):3085–3097, July 2022. CODEN ???? ISSN 2150-8097.

Lyu:2022:FGM

[3044] Chenghao Lyu, Qi Fan, Fei Song, Arnab Sinha, Yanlei Diao, Wei Chen, Li Ma, Yihui Feng, Yaliang Li, Kai Zeng, and Jingren Zhou. Fine-grained modeling and optimization for intelligent resource management in big data processing. *Proceedings of the VLDB Endowment*, 15(11):3098–3111, July 2022. CODEN ???? ISSN 2150-8097.

Liu:2022:FCM

[3045] Ziyi Liu, Lei Li, Mengxuan Zhang, Wen Hua, and Xiaofang Zhou. FHL-cube: multi-constraint shortest path querying with flexible combination of constraints. *Proceedings of the VLDB Endowment*, 15(11):3112–3125, July 2022. CODEN ???? ISSN 2150-8097.

Abebe:2022:TEP

[3046] Michael Abebe, Horatiu Lazu, and Khuzaima Daudjee. Tiresias: enabling predictive autonomous storage and indexing. *Proceedings of the VLDB Endowment*, 15(11):3126–3136, July 2022. CODEN ???? ISSN 2150-8097.

Asudeh:2022:TDA

[3047] Abolfazl Asudeh and Fatemeh Nargesian. Towards distribution-aware query answering in data markets. *Proceedings of the VLDB Endowment*, 15(11):3137–3144, July 2022. CODEN ???? ISSN 2150-8097.

Kwon:2022:CEA

[3048] Suyong Kwon, Woohwan Jung, and Kyuseok Shim. Cardinality estimation of approximate substring queries using deep learning. *Proceedings of the VLDB Endowment*, 15(11):3145–3157, July 2022. CODEN ???? ISSN 2150-8097.

Saur:2022:CEU

[3049] Karla Saur, Tara Mirmira, Konstantinos Karanasos, and Jesús Camacho-Rodríguez. Containerized execution of UDFs: an experimental evaluation. *Proceedings of the VLDB Endowment*, 15(11):3158–3171, July 2022. CODEN ???? ISSN 2150-8097.

Xia:2022:DSD

[3050] Siyuan Xia, Zhiru Zhu, Chris Zhu, Jinjin Zhao, Kyle Chard, Aaron J. Elmore, Ian Foster, Michael Franklin, Sanjay Krishnan, and Raul Castro Fernandez. Data station: delegated, trustworthy, and auditable computation to enable data-sharing consortia with a data escrow. *Proceedings of the VLDB Endowment*, 15(11):3172–3185, July 2022. CODEN ???? ISSN 2150-8097.

Ammar:2022:ODM

[3051] Khaled Ammar, Siddhartha Sahu, Semih Salihoglu, and M. Tamer Özsu. Optimizing differentially-maintained recursive queries on dynamic graphs. *Proceedings of the VLDB Endowment*, 15(11):3186–3198, July 2022. CODEN ???? ISSN 2150-8097.

Luo:2022:DTR

[3052] Zihan Luo, Lei Li, Mengxuan Zhang, Wen Hua, Yehong Xu, and Xiaofang Zhou. Diversified top-k route planning in road network. *Proceedings of the VLDB Endowment*, 15(11):3199–3212, July 2022. CODEN ???? ISSN 2150-8097.

Zhou:2022:MSE

[3053] Xiangmin Zhou and Lei Chen. Migrating social event recommendation over microblogs. *Proceedings of the VLDB Endowment*, 15(11):3213–3225, July 2022. CODEN ???? ISSN 2150-8097.

Chen:2022:STC

[3054] Yueting Chen, Nick Koudas, Xiaohui Yu, and Ziqiang Yu. Spatial and temporal constrained ranked retrieval over videos. *Proceedings of the VLDB Endowment*, 15(11):3226–3239, July 2022. CODEN ???? ISSN 2150-8097.

Liao:2022:SSG

[3055] Ningyi Liao, Dingheng Mo, Siqiang Luo, Xiang Li, and Pengcheng Yin. SCARA: scalable graph neural networks with feature-oriented optimization. *Proceedings of the VLDB Endowment*, 15(11):3240–3248, July 2022. CODEN ???? ISSN 2150-8097.

Manousis:2022:EEG

[3056] Antonis Manousis, Zhuo Cheng, Ran Ben Basat, Zaoxing Liu, and Vyas Sekar. Enabling efficient and general subpopulation analytics in multidimensional data streams. *Proceedings of the VLDB Endowment*, 15(11):3249–3262, July 2022. CODEN ???? ISSN 2150-8097.

Chen:2022:DST

[3057] Qing Chen, Oded Lachish, Sven Helmer, and Michael H. Böhlen. Dynamic spanning trees for connectivity queries on fully-dynamic undirected graphs. *Proceedings of the VLDB Endowment*, 15(11):3263–3276, July 2022. CODEN ???? ISSN 2150-8097.

Chiosa:2022:HAC

[3058] Monica Chiosa, Fabio Maschi, Ingo Müller, Gustavo Alonso, and Norman May. Hardware acceleration of compression and encryption in SAP HANA. *Proceedings of the VLDB Endowment*, 15(12):3277–3291, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554822`.

Graf:2022:FPB

[3059] Martin Graf, Lukas Laskowski, Florian Papsdorf, Florian Sold, Roland Gremmelspacher, Felix Naumann, and Fabian Panse. Frost: a platform for benchmarking and exploring data matching results. *Proceedings of the VLDB Endowment*, 15(12):3292–3305, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554823.

Li:2022:BHP

[3060] Changji Li, Hongzhi Chen, Shuai Zhang, Yingqian Hu, Chao Chen, Zhenjie Zhang, Meng Li, Xiangchen Li, Dongqing Han, Xiaohui Chen, Xudong Wang, Huiming Zhu, Xuwei Fu, Tingwei Wu, Hongfei Tan, Hengtian Ding, Mengjin Liu, Kangcheng Wang, Ting Ye, Lei Li, Xin Li, Yu Wang, Chenguang Zheng, Hao Yang, and James Cheng. ByteGraph: a high-performance distributed graph database in ByteDance. *Proceedings of the VLDB Endowment*, 15(12): 3306–3318, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554824.

Das:2022:CEC

[3061] Prakash Das, Shivangi Srivastava, Valentin Moskovich, Anmol Chaturvedi, Anant Mittal, Yongqin Xiao, and Mosharaf Chowdhury. CDI-E: an elastic cloud service for data engineering. *Proceedings of the VLDB Endowment*, 15(12):3319–3331, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554825.

Wang:2022:OED

[3062] Sheng Wang, Yiran Li, Huorong Li, Feifei Li, Chengjin Tian, Le Su, Yanshan Zhang, Yubing Ma, Lie Yan, Yuanyuan Sun, Xuntao Cheng, Xiaolong Xie, and Yu Zou. Operon: an encrypted database for ownership-preserving data management. *Proceedings of the VLDB Endowment*, 15 (12):3332–3345, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554826.

Gong:2022:TPF

[3063] Caixin Gong, Chengjin Tian, Zhengheng Wang, Sheng Wang, Xiyu Wang, Qiulei Fu, Wu Qin, Long Qian, Rui Chen, Jiang Qi, Ruo Wang, Guoyun Zhu, Chenghu Yang, Wei Zhang, and Feifei Li. Tair-PMem: a fully durable non-volatile memory database. *Proceedings of the VLDB Endowment*, 15 (12):3346–3358, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554827.

Lambov:2022:TMC

[3064] Branimir Lambov. Trie memtables in Cassandra. *Proceedings of the VLDB Endowment*, 15(12):3359–3371, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554828.

Pedreira:2022:VMU

[3065] Pedro Pedreira, Orri Erling, Masha Basmanova, Kevin Wilfong, Laith Sakka, Krishna Pai, Wei He, and Biswapesh Chattopadhyay. Velox: meta's unified execution engine. *Proceedings of the VLDB Endowment*, 15

(12):3372–3384, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554829.

Yang:2022:OMT

[3066] Zhenkun Yang, Chuanhui Yang, Fusheng Han, Mingqiang Zhuang, Bing Yang, Zhifeng Yang, Xiaojun Cheng, Yuzhong Zhao, Wenhui Shi, Huafeng Xi, Huang Yu, Bin Liu, Yi Pan, Boxue Yin, Junquan Chen, and Quanqing Xu. OceanBase: a 707 million tpmC distributed relational database system. *Proceedings of the VLDB Endowment*, 15(12):3385–3397, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554830.

Lan:2022:VVR

[3067] Hai Lan, Jiong Xie, Zhifeng Bao, Feifei Li, Wei Tian, Fang Wang, Sheng Wang, and Ailin Zhang. VRE: a versatile, robust, and economical trajectory data system. *Proceedings of the VLDB Endowment*, 15(12):3398–3410, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554831.

Chen:2022:BBH

[3068] Jianjun Chen, Yonghua Ding, Ye Liu, Fangshi Li, Li Zhang, Mingyi Zhang, Kui Wei, Lixun Cao, Dan Zou, Yang Liu, Lei Zhang, Rui Shi, Wei Ding, Kai Wu, Shangyu Luo, Jason Sun, and Yuming Liang. ByteHTAP: Bytedance's HTAP system with high data freshness and strong data consistency. *Proceedings of the VLDB Endowment*, 15(12):3411–3424, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554832.

Wingerath:2022:BCW

[3069] Wolfram Wingerath, Benjamin Wollmer, Markus Bestehorn, Stephan Succo, Sophie Ferrlein, Florian Bücklers, Jörn Domnik, Fabian Panse, Erik Witt, Anil Sener, Felix Gessert, and Norbert Ritter. Beaconnect: continuous web performance A/B testing at scale. *Proceedings of the VLDB Endowment*, 15(12):3425–3431, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554833.

Chen:2022:COC

[3070] Zongzhi Chen, Xinjun Yang, Feifei Li, Xuntao Cheng, Qingda Hu, Zheyu Miao, Rongbiao Xie, Xiaofei Wu, Kang Wang, Zhao Song, Haiqing Sun, Zechao Zhuang, Yuming Yang, Jie Xu, Liang Yin, Wenchao Zhou, and Sheng Wang. CloudJump: optimizing cloud databases for cloud storages. *Proceedings of the VLDB Endowment*, 15(12):3432–3444, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554834.

Zheng:2022:DMN

[3071] Kaiping Zheng, Shaofeng Cai, Horng Ruey Chua, Melanie Herschel, Meihui Zhang, and Beng Chin Ooi. DyHealth: making neural networks dynamic for effective healthcare analytics. *Proceedings of the VLDB Endowment*, 15(12):3445–3458, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554835.

Mishchenko:2022:BCS

[3072] Andrey Mishchenko, Dominique Danco, Abhilash Jindal, and Adrian Blue. Blueprint: a constraint-solving approach for document extraction. *Proceedings of the VLDB Endowment*, 15 (12):3459–3471, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554836.

Yu:2022:TCL

[3073] Muzhi Yu, Zhaoxiang Lin, Jinan Sun, Runyun Zhou, Guoqiang Jiang, Hua Huang, and Shikun Zhang. Tencent-CLS: the cloud log service with high query performances. *Proceedings of the VLDB Endowment*, 15(12):3472–3482, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554837.

Xie:2022:GMD

[3074] Jiong Xie, Zhen Chen, Jianwei Liu, Fang Wang, Feifei Li, Zhida Chen, Yinpei Liu, Songlu Cai, Zhenhua Fan, Fei Xiao, and Yue Chen. Ganos: a multidimensional, dynamic, and scene-oriented cloud-native spatial database engine. *Proceedings of the VLDB Endowment*, 15(12):3483–3495, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554838.

Lakshman:2022:MHD

[3075] Sarath Lakshman, Apaar Gupta, Rohan Suri, Scott Lashley, John Liang, Srinath Duvuru, and Ravi Mayuram. Magma: a high data density storage engine used in Couchbase. *Proceedings of the VLDB Endowment*, 15(12):3496–3508, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554839.

Cahoon:2022:DAS

[3076] Joyce Cahoon, Wenjing Wang, Yiwen Zhu, Katherine Lin, Sean Liu, Raymond Truong, Neetu Singh, Chengcheng Wan, Alexandra Ciortea, Sreraman Narasimhan, and Subru Krishnan. Doppler: automated SKU recommendation in migrating SQL workloads to the cloud. *Proceedings of the VLDB Endowment*, 15(12):3509–3521, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554840.

Harizopoulos:2022:MNG

[3077] Stavros Harizopoulos, Taylor Hopper, Morton Mo, Shyam Sundar Chandrasekaran, Tongguang Chen, Yan Cui, Nandini Ganesh, Gary Helmling, Hieu Pham, and Sebastian Wong. Meta's next-generation realtime monitoring and analytics platform. *Proceedings of the VLDB Endowment*, 15 (12):3522–3534, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554841.

Gaffney:2022:SPP

[3078] Kevin P. Gaffney, Martin Prammer, Larry Brasfield, D. Richard Hipp, Dan Kennedy, and Jignesh M. Patel. SQLite: past, present, and future. *Proceedings of the VLDB Endowment*, 15(12):3535–3547, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554842.

Guo:2022:MCN

[3079] Rentong Guo, Xiaofan Luan, Long Xiang, Xiao Yan, Xiaomeng Yi, Jigao Luo, Qianya Cheng, Weizhi Xu, Jiarui Luo, Frank Liu, Zhenshan Cao, Yanliang Qiao, Ting Wang, Bo Tang, and Charles Xie. Manu: a cloud native vector database management system. *Proceedings of the VLDB Endowment*, 15(12):3548–3561, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554843`.

Galhotra:2022:ARD

[3080] Sainyam Galhotra and Udayan Khurana. Automated relational data explanation using external semantic knowledge. *Proceedings of the VLDB Endowment*, 15(12):3562–3565, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554844`.

Rossi:2022:KEF

[3081] Andrea Rossi, Donatella Firmani, Paolo Merialdo, and Tommaso Teofili. Kelpie: an explainability framework for embedding-based link prediction models. *Proceedings of the VLDB Endowment*, 15(12):3566–3569, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554845`.

Lin:2022:ODC

[3082] Yin Lin, Brit Youngmann, Yuval Moskovitch, H. V. Jagadish, and Tova Milo. OREO: detection of cherry-picked generalizations. *Proceedings of the VLDB Endowment*, 15(12):3570–3573, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554846`.

Kohn:2022:DWF

[3083] André Kohn, Dominik Moritz, Mark Raasveldt, Hannes Mühleisen, and Thomas Neumann. DuckDB-wasm: fast analytical processing for the web. *Proceedings of the VLDB Endowment*, 15(12):3574–3577, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554847`.

Xi:2022:EHL

[3084] Yihai Xi, Ning Wang, Xinyu Chen, Yiyi Zhang, Zilong Wang, Zhihong Xu, and Yue Wang. EasyDR: a human-in-the-loop error detection & repair platform for holistic table cleaning. *Proceedings of the VLDB Endowment*, 15(12):3578–3581, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554848`.

Pan:2022:HFD

[3085] Xuchen Pan, Yongxin Tong, Chunbo Xue, Zimu Zhou, Junping Du, Yuxiang Zeng, Yexuan Shi, Xiaofei Zhang, Lei Chen, Yi Xu, Ke Xu, and Weifeng Lv. Hu-fu: a data federation system for secure spatial queries. *Proceedings of the VLDB Endowment*, 15(12):3582–3585, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554849`.

Gassen:2022:DCS

[3086] Marius Gassen, Benjamin Hättasch, Benjamin Hilprecht, Nadja Geisler, Alexander Fraser, and Carsten Binnig. Demonstrating CAT: synthesizing data-aware conversational agents for transactional databases. *Proceedings of the VLDB Endowment*, 15(12): 3586–3589, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554850.

Personnaz:2022:EGE

[3087] Aurélien Personnaz, Brit Youngmann, and Sihem Amer-Yahia. EDA4SUM: guided exploration of data summaries. *Proceedings of the VLDB Endowment*, 15(12):3590–3593, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554851.

Li:2022:CEQ

[3088] Chenjie Li, Juseung Lee, Zhengjie Miao, Boris Glavic, and Sudeepa Roy. CaJaDE: explaining query results by augmenting provenance with context. *Proceedings of the VLDB Endowment*, 15(12):3594–3597, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554852.

Asada:2022:STT

[3089] Yuki Asada, Victor Fu, Apurva Gandhi, Advitya Gemawat, Lihao Zhang, Dong He, Vivek Gupta, Ehi Nosakhare, Dalitso Banda, Rathijit Sen, and Matteo Interlandi. Share the tensor tea: how databases can leverage the machine learning ecosystem. *Proceedings of the VLDB Endowment*, 15 (12):3598–3601, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554853.

Tan:2022:MTV

[3090] Jess Tan, Desmond Yeo, Rachael Neoh, Huey-Eng Chua, and Sourav S Bhowmick. MOCHA: a tool for visualizing impact of operator choices in query execution plans for database education. *Proceedings of the VLDB Endowment*, 15(12):3602–3605, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554854.

Chan:2022:LVK

[3091] Tsz Nam Chan, Pak Lon Ip, Kaiyan Zhao, Leong Hou U, Byron Choi, and Jianliang Xu. LIBKDV: a versatile kernel density visualization library for geospatial analytics. *Proceedings of the VLDB Endowment*, 15(12):3606–3609, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554855.

Ajmani:2022:DMR

[3092] Arul Ajmani, Aayush Shah, Alexander Shraer, Adam Storm, Rebecca Taft, Oliver Tan, and Nathan VanBenschoten. A demonstration of multi-region CockroachDB. *Proceedings of the VLDB Endowment*, 15(12):3610–3613, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554856.

Chapman:2022:DAD

[3093] Adriane Chapman, Luca Lauro, Paolo Missier, and Riccardo Torlone. DPDS: assisting data science with data provenance. *Proceedings of the VLDB Endowment*, 15(12):3614–3617, August 2022. CODEN ???? ISSN 2150-

8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554857`.

Dadvar:2022:PPO

[3094] Vargha Dadvar, Lukasz Golab, and Divesh Srivastava. POEM: pattern-oriented explanations of CNN models. *Proceedings of the VLDB Endowment*, 15(12):3618–3621, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554858`.

Zalipynis:2022:WGA

[3095] Ramon Antonio Rodriges Zalipynis and Nikita Terlych. WebArrayDB: a geospatial array DBMS in your web browser. *Proceedings of the VLDB Endowment*, 15(12):3622–3625, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554859`.

Lan:2022:ATA

[3096] Hai Lan, Yuanjia Zhang, Zhifeng Bao, Yu Dong, Dongxu Huang, Liu Tang, and Jian Zhang. AutoDI: towards an automatic plan regression analysis. *Proceedings of the VLDB Endowment*, 15(12):3626–3629, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554860`.

Davidson:2022:PEA

[3097] Susan B. Davidson, Shay Gershtein, Tova Milo, Slava Novgorodov, and May Shoshan. PHOcus: efficiently archiving photos. *Proceedings of the VLDB Endowment*, 15(12):3630–3633, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554861`.

Huang:2022:VTE

[3098] Kai Huang, Qingqing Ye, Jing Zhao, Xi Zhao, Haibo Hu, and Xiaofang Zhou. VINCENT: towards efficient exploratory subgraph search in graph databases. *Proceedings of the VLDB Endowment*, 15(12):3634–3637, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554862`.

Drien:2022:AAP

[3099] Osnat Drien, Matanya Freiman, and Yael Amsterdamer. ActivePDB: active probabilistic databases. *Proceedings of the VLDB Endowment*, 15(12):3638–3641, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554863`.

Teofili:2022:CED

[3100] Tommaso Teofili, Donatella Firmani, Nick Koudas, Paolo Merialdo, and Divesh Srivastava. CERTEM: explaining and debugging black-box entity resolution systems with CERTA. *Proceedings of the VLDB Endowment*, 15(12):3642–3645, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554864`.

Aksoy:2022:SIS

[3101] Ahmet Kerem Aksoy, Pavel Dushev, Eleni Tzirita Zacharatou, Holmer Hemsen, Marcela Charfuelan, Jorge-Arnulfo Quiané-Ruiz, Begüm Demir, and Volker Markl. Satellite image search in AgoraEO. *Proceedings of the VLDB Endowment*, 15(12):3646–3649, August 2022. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3554821.3554865.

Yan:2022:SDD

[3102] Li Yan, Nerissa Xu, Guozhong Li, Sourav S Bhowmick, Byron Choi, and Jianliang Xu. SENSOR: data-driven construction of sketch-based visual query interfaces for time series data. *Proceedings of the VLDB Endowment*, 15(12):3650–3653, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554866.

Bonifati:2022:DPG

[3103] Angela Bonifati, Stefania Dumbrava, Emile Martinez, Fatemeh Ghasemi, Malo Jaffré, Pacôme Luton, and Thomas Pickles. DiscoPG: property graph schema discovery and exploration. *Proceedings of the VLDB Endowment*, 15(12):3654–3657, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554867.

Maamar-Kouadri:2022:SQO

[3104] Wissam Maamar-Kouadri, Salima Benbernou, Mourad Ouziri, Themis Palpanas, and Iheb Ben Amor. SA-Q: observing, evaluating, and enhancing the quality of the results of sentiment analysis tools. *Proceedings of the VLDB Endowment*, 15(12):3658–3661, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554868.

Orogat:2022:SDA

[3105] Abdelghny Orogat and Ahmed El-Roby. SmartBench: demonstrating automatic generation of comprehensive benchmarks for question answering over knowledge graphs. *Proceedings of the VLDB Endowment*, 15(12):3662–3665, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554869.

Tu:2022:DHE

[3106] Jianhong Tu, Xiaoyue Han, Ju Fan, Nan Tang, Chengliang Chai, Guoliang Li, and Xiaoyong Du. DADER: hands-off entity resolution with domain adaptation. *Proceedings of the VLDB Endowment*, 15(12):3666–3669, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554870.

Gale:2022:SWS

[3107] James Gale, Max Seiden, Deepanshu Utkarsh, Jason Frantz, Rob Woollen, and Çağatay Demiralp. Sigma workbook: a spreadsheet for cloud data warehouses. *Proceedings of the VLDB Endowment*, 15(12):3670–3673, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554871.

Chen:2022:RMC

[3108] Zihao Chen, Zhizhen Xu, Baokun Han, Chen Xu, Weining Qian, and Aoying Zhou. ReMac: a matrix computation system with redundancy elimination. *Proceedings of the VLDB Endowment*, 15(12):3674–3677, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554872.

Wenig:2022:TBT

[3109] Phillip Wenig, Sebastian Schmidl, and Thorsten Papenbrock. TimeEval: a benchmarking toolkit for time series anomaly detection algorithms. *Proceedings of the VLDB Endowment*, 15(12):3678–3681, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554873.

Lerner:2022:DAH

[3110] Alberto Lerner, Matthias Jasny, Theo Jepsen, Carsten Binnig, and Philippe Cudré-Mauroux. DBMS annihilator: a high-performance database workload generator in action. *Proceedings of the VLDB Endowment*, 15(12):3682–3685, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554874.

Liang:2022:FSF

[3111] Zhiyu Liang and Hongzhi Wang. FedTSC: a secure federated learning system for interpretable time series classification. *Proceedings of the VLDB Endowment*, 15(12):3686–3689, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554875.

Wu:2022:AVA

[3112] Qingshun Wu, Yafei Li, Huiling Li, Di Zhang, and Guanglei Zhu. AMRAS: a visual analysis system for spatial crowdsourcing. *Proceedings of the VLDB Endowment*, 15(12):3690–3693, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554876.

Al-Sayeh:2022:SCA

[3113] Hani Al-Sayeh, Muhammad Attahir Jibril, Muhammad Waleed Bin Saeed, and Kai-Uwe Sattler. SparkCAD: caching anomalies detector for Spark applications. *Proceedings of the VLDB Endowment*, 15(12):3694–3697, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554877.

vLeeuwen:2022:AQP

[3114] Wilco v. Leeuwen, Thomas Mulder, Bram van de Wall, George Fletcher, and Nikolay Yakovets. AvantGraph query processing engine. *Proceedings of the VLDB Endowment*, 15(12):3698–3701, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554878.

Boniol:2022:TNL

[3115] Paul Boniol, John Paparrizos, Yuhao Kang, Themis Palpanas, Ruey S. Tsay, Aaron J. Elmore, and Michael J. Franklin. Theseus: navigating the labyrinth of time-series anomaly detection. *Proceedings of the VLDB Endowment*, 15(12):3702–3705, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554879.

Hofmann:2022:DAS

[3116] Dennis Hofmann, Peter VanNostrand, Huayi Zhang, Yizhou Yan, Lei Cao, Samuel Madden, and Elke Rundensteiner. A demonstration of AutoOD: a self-tuning anomaly detection system. *Proceedings of the VLDB Endowment*, 15(12):3706–3709, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554880.

Gakhar:2022:POA

[3117] Sunny Gakhar, Joyce Cahoon, Wangchao Le, Xiangnan Li, Kaushik Ravichandran, Hiren Patel, Marc Friedman, Brandon Haynes, Shi Qiao, Alekh Jindal, and Jyoti Leeka. Pipemizer: an optimizer for analytics data pipelines. *Proceedings of the VLDB Endowment*, 15(12):3710–3713, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554881.

Redyuk:2022:DAA

[3118] Sergey Redyuk, Zoi Kaoudi, Sebastian Schelter, and Volker Markl. DORIAN in action: assisted design of data science pipelines. *Proceedings of the VLDB Endowment*, 15(12):3714–3717, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554882.

He:2022:WDN

[3119] Yuntian He, Yue Zhang, Saket Gurukar, and Srinivasan Parthasarathy. WebMILE: democratizing network representation learning at scale. *Proceedings of the VLDB Endowment*, 15(12):3718–3721, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554883.

Geisler:2022:DQQ

[3120] Nadja Geisler, Benjamin Hättasch, and Carsten Binnig. Demonstrating quest: a query-driven framework to explain classification models on tabular data. *Proceedings of the VLDB Endowment*, 15(12):3722–3725, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554884.

Ripberger:2022:IID

[3121] Drew Ripberger, Yifan Gan, Xueyuan Ren, Spyros Blanas, and Yang Wang. IsoBugView: interactively debugging isolation bugs in database applications. *Proceedings of the VLDB Endowment*, 15(12):3726–3729, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554885.

Foufoulas:2022:YRU

[3122] Yannis Foufoulas, Alkis Simitsis, and Yannis Ioannidis. YeSQL: rich user-defined functions without the overhead. *Proceedings of the VLDB Endowment*, 15(12):3730–3733, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554886.

Yang:2022:DAM

[3123] Zhihui Yang, Yicong Huang, Zuozhi Wang, Feng Gao, Yao Lu, Chen Li, and X. Sean Wang. Demonstration of accelerating machine learning inference queries with correlative proxy models. *Proceedings of the VLDB Endowment*, 15(12):3734–3737, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554887.

Liu:2022:DCI

[3124] Xiaozhen Liu, Zuozhi Wang, Shengquan Ni, Sadeem Alsudais, Yicong Huang, Avinash Kumar, and Chen Li. Demonstration of collaborative and interactive workflow-based data analytics in Texera. *Proceedings of the VLDB Endowment*, 15(12):3738–3741, August 2022.

CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554888.

Zalipynis:2022:SAR

[3125] Ramon Antonio Rodriges Zalipynis. SimDB in action: road traffic simulations completely inside array DBMS. *Proceedings of the VLDB Endowment*, 15(12):3742–3745, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554889.

Badaro:2022:TTD

[3126] Gilbert Badaro and Paolo Papotti. Transformers for tabular data representation: a tutorial on models and applications. *Proceedings of the VLDB Endowment*, 15(12):3746–3749, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554890.

Kiehn:2022:PDM

[3127] Felix Kiehn, Mareike Schmidt, Daniel Glake, Fabian Panse, Wolfram Wingerath, Benjamin Wollmer, Martin Poppinga, and Norbert Ritter. Polyglot data management: state of the art & open challenges. *Proceedings of the VLDB Endowment*, 15(12):3750–3753, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554891.

Wasay:2022:MPT

[3128] Abdul Wasay, Nesime Tatbul, and Justin Gottschlich. Machine programming: turning data into programmer productivity. *Proceedings of the VLDB Endowment*, 15(12):3754–3757, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554892.

Li:2022:CDN

[3129] Guoliang Li, Haowen Dong, and Chao Zhang. Cloud databases: new techniques, challenges, and opportunities. *Proceedings of the VLDB Endowment*, 15(12):3758–3761, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554893.

Mhedhbi:2022:MTQ

[3130] Amine Mhedhbi and Semih Salihoglu. Modern techniques for querying graph-structured relations: foundations, system implementations, and open challenges. *Proceedings of the VLDB Endowment*, 15(12):3762–3765, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554894.

Fang:2022:DSD

[3131] Yixiang Fang, Wensheng Luo, and Chenhao Ma. Densest subgraph discovery on large graphs: applications, challenges, and techniques. *Proceedings of the VLDB Endowment*, 15(12):3766–3769, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554895.

Trummer:2022:BGC

[3132] Immanuel Trummer. From BERT to GPT-3 codex: harnessing the potential of very large language models for data management. *Proceedings of the VLDB Endowment*, 15(12):3770–3773, August 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3554821.3554896.

Huang:2022:PPF

[3133] Kaisong Huang, Yuliang He, and Tianzheng Wang. The past, present and future of indexing on persistent memory. *Proceedings of the VLDB Endowment*, 15(12):3774–3777, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554897`.

Kaoudi:2022:UDA

[3134] Zoi Kaoudi and Jorge-Arnulfo Quiané-Ruiz. Unified data analytics: state-of-the-art and open problems. *Proceedings of the VLDB Endowment*, 15 (12):3778–3781, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554898`.

Fan:2022:BGC

[3135] Wenfei Fan. Big graphs: challenges and opportunities. *Proceedings of the VLDB Endowment*, 15(12):3782–3797, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554899`.

Amer-Yahia:2022:TAP

[3136] Sihem Amer-Yahia. Towards AI-powered data-driven education. *Proceedings of the VLDB Endowment*, 15 (12):3798–3806, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554900`.

Sun:2022:HIN

[3137] Yizhou Sun, Jiawei Han, Xifeng Yan, Philip S. Yu, and Tianyi Wu. Heterogeneous information networks: the past, the present, and the future. *Proceedings of the VLDB Endowment*, 15 (12):3807–3811, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554901`.

Roy:2022:TIA

[3138] Sudeepa Roy. Toward interpretable and actionable data analysis with explanations and causality. *Proceedings of the VLDB Endowment*, 15(12):3812–3820, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554902`.

Ozcan:2022:RMD

[3139] Fatma Özcan. Reflections on my data management research journey (VLDB women in database research award talk). *Proceedings of the VLDB Endowment*, 15(12):3821–3822, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554903`.

Mohan:2022:PSF

[3140] C. Mohan. Panel: startups founded by database researchers. *Proceedings of the VLDB Endowment*, 15(12): 3823–3825, August 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3554821.3554904`.

Balazinska:2022:CDS

[3141] Magdalena Balazinska, Surajit Chaudhuri, AnHai Doan, Joseph M. Hellerstein, Hanuma Kodavalla, Ippokratis Pandis, and Matei Zaharia. Cloud data systems: what are the opportunities for the database research community? *Proceedings of the VLDB Endowment*, 15(12):3826–3827, August 2022. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3554821.3554905.

John:2022:HDD

[3142] Sachin Basil John and Christoph Koch. High-dimensional data cubes. *Proceedings of the VLDB Endowment*, 15(13):3828–3840, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565839.

Ceccarello:2022:FSM

[3143] Matteo Ceccarello and Johann Gamper. Fast and scalable mining of time series motifs with probabilistic guarantees. *Proceedings of the VLDB Endowment*, 15(13):3841–3853, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565840.

Deutch:2022:FEF

[3144] Daniel Deutch, Amir Gilad, Tova Milo, Amit Mualem, and Amit Somech. FEDEX: an explainability framework for data exploration steps. *Proceedings of the VLDB Endowment*, 15(13):3854–3868, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565841.

Xekalaki:2022:ETA

[3145] Maria Xekalaki, Juan Fumero, Athanasios Stratikopoulos, Katerina Doka, Christos Katsakioris, Constantinos Bitsakos, Nectarios Koziris, and Christos Kotselidis. Enabling transparent acceleration of big data frameworks using heterogeneous hardware. *Proceedings of the VLDB Endowment*, 15(13):3869–3882, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565842.

Fazzone:2022:DPN

[3146] Adriano Fazzone, Tommaso Lanciano, Riccardo Denni, Charalampos E. Tsourakakis, and Francesco Bonchi. Discovering polarization niches via dense subgraphs with attractors and repulsers. *Proceedings of the VLDB Endowment*, 15(13):3883–3896, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565843.

Lee:2022:SSU

[3147] Eunjae Lee, Sam H. Noh, and Jiwon Seo. Sage: a system for uncertain network analysis. *Proceedings of the VLDB Endowment*, 15(13):3897–3910, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565844.

Qin:2022:MBC

[3148] Hongchao Qin, Rong-Hua Li, Ye Yuan, Guoren Wang, Lu Qin, and Zhiwei Zhang. Mining bursting core in large temporal graphs. *Proceedings of the VLDB Endowment*, 15(13):3911–3923, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565845.

Yu:2022:CBL

[3149] Xiang Yu, Chengliang Chai, Guoliang Li, and Jiabin Liu. Cost-based or learning-based?: a hybrid query optimizer for query plan selection. *Proceedings of the VLDB Endowment*, 15(13):3924–3936, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565846.

Meng:2022:OIA

[3150] Jingfan Meng, Huayi Wang, Jun Xu, and Mitsunori Ogihara. ONe Index for All Kernels (ONIAK): a zero re-indexing LSH solution to ANNS-ALT (After Linear Transformation). *Proceedings of the VLDB Endowment*, 15(13):3937–3949, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565847.

Shi:2022:LIB

[3151] Jiachen Shi, Gao Cong, and Xiao-Li Li. Learned index benefits: Machine learning based index performance estimation. *Proceedings of the VLDB Endowment*, 15(13):3950–3962, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565848.

Wang:2022:ORM

[3152] Jiachuan Wang, Peng Cheng, Libin Zheng, Lei Chen, and Wenjie Zhang. Online ridesharing with meeting points. *Proceedings of the VLDB Endowment*, 15(13):3963–3975, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565849.

Bellomarini:2022:EPE

[3153] Luigi Bellomarini, Davide Benedetto, Matteo Brandetti, and Emanuel Sallinger. Exploiting the power of equality-generating dependencies in ontological reasoning. *Proceedings of the VLDB Endowment*, 15(13):3976–3988, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565850.

Aamand:2022:NRF

[3154] Anders Aamand, Debarati Das, Evangelos Kipouridis, Jakob B. T. Knudsen, Peter M. R. Rasmussen, and Mikkel Thorup. No repetition: Fast and reliable sampling with highly concentrated hashing. *Proceedings of the VLDB Endowment*, 15(13):3989–4001, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565851.

Attouche:2022:WGJ

[3155] Lyes Attouche, Mohamed-Amine Baazizi, Dario Colazzo, Giorgio Ghelli, Carlo Sartiani, and Stefanie Scherzinger. Witness generation for JSON schema. *Proceedings of the VLDB Endowment*, 15(13):4002–4014, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565852.

Shankar:2022:TOP

[3156] Shreya Shankar and Aditya G. Parameswaran. Towards observability for production machine learning pipelines. *Proceedings of the VLDB Endowment*, 15(13):4015–4022, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565853.

Lee:2022:DES

[3157] Sekwon Lee, Soujanya Ponnapalli, Sharad Singhal, Marcos K. Aguilera, Kimberly Keeton, and Vijay Chidambaram. DINOMO: an elastic, scalable, high-performance key-value store for disaggregated persistent memory. *Proceedings of the VLDB Endowment*, 15(13):4023–4037, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565854.

Shankar:2022:BCR

[3158] Shreya Shankar, Stephen Macke, Sarah Chasins, Andrew Head, and Aditya Parameswaran. Bolt-on, compact, and rapid program slicing for notebooks. *Proceedings of the VLDB Endowment*, 15(13):4038–4047, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565855.

Sun:2022:FMT

[3159] Weijie Sun, Zihuan Xu, and Lei Chen. Fairness matters: a tit-for-tat strategy against selfish mining. *Proceedings of the VLDB Endowment*, 15(13):4048–4061, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565856.

Ding:2022:SIO

[3160] Jialin Ding, Ryan Marcus, Andreas Kipf, Vikram Nathan, Aniruddha Nrusimha, Kapil Vaidya, Alexander van Renen, and Tim Kraska. SageDB: an instance-optimized data analytics system. *Proceedings of the VLDB Endowment*, 15(13):4062–4078, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565857.

Richly:2022:BCF

[3161] Keven Richly, Rainer Schlosser, and Martin Boissier. Budget-conscious fine-grained configuration optimization for spatio-temporal applications. *Proceedings of the VLDB Endowment*, 15(13):4079–4092, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565858.

Hsieh:2022:NGC

[3162] Cheng-Yu Hsieh, Jieyu Zhang, and Alexander Ratner. Nemo: Guiding and contextualizing weak supervision for interactive data programming. *Proceedings of the VLDB Endowment*, 15(13):4093–4105, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565838.3565859.

Helt:2022:CCC

[3163] Jeffrey Helt, Abhinav Sharma, Daniel J. Abadi, Wyatt Lloyd, and Jose M. Faleiro. C5: cloned concurrency control that always keeps up. *Proceedings of the VLDB Endowment*, 16(1):1–14, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561262.

Wang:2022:CDS

[3164] Ruihong Wang, Jianguo Wang, Stratos Idreos, M. Tamer Özsu, and Walid G. Aref. The case for distributed shared-memory databases with RDMA-enabled memory disaggregation. *Proceedings of the VLDB Endowment*, 16(1):15–22, September 2022. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3561261.3561263.

Wu:2022:FED

[3165] Chenyuan Wu, Mohammad Javad Amiri, Jared Asch, Heena Nagda, Qizhen Zhang, and Boon Thau Loo. FlexChain: an elastic disaggregated blockchain. *Proceedings of the VLDB Endowment*, 16(1):23–36, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561264.

Zhang:2022:MNL

[3166] Zhen Zhang, Shuai Zheng, Yida Wang, Justin Chiu, George Karypis, Trishul Chilimbi, Mu Li, and Xin Jin. MiCS: near-linear scaling for training gigantic model on public cloud. *Proceedings of the VLDB Endowment*, 16(1):37–50, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561265.

Yang:2022:PPC

[3167] Yi Yang, Yurong Cheng, Ye Yuan, Guoren Wang, Lei Chen, and Yongjiao Sun. Privacy-preserving cooperative online matching over spatial crowdsourcing platforms. *Proceedings of the VLDB Endowment*, 16(1):51–63, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561266.

Wang:2022:CMT

[3168] Jiayi Wang, Chengliang Chai, Nan Tang, Jiabin Liu, and Guoliang Li. Coresets over multiple tables for feature-rich and data-efficient machine learning. *Proceedings of the VLDB Endowment*, 16(1):64–76, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561267.

Zhang:2022:SMM

[3169] Zihao Zhang, Huiqi Hu, Xuan Zhou, and Jiang Wang. Starry: multi-master transaction processing on semi-leader architecture. *Proceedings of the VLDB Endowment*, 16(1):77–89, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561268.

Skitsas:2022:SSE

[3170] Konstantinos Skitsas, Ioannis G. Papageorgiou, Mohammad Sadegh Talebi, Verena Kantere, Michael N. Katehakis, and Panagiotis Karras. SIFTER: space-efficient value iteration for finite-horizon MDPs. *Proceedings of the VLDB Endowment*, 16(1):90–98, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561269.

Yu:2022:TUP

[3171] Geoffrey X. Yu, Markos Markakis, Andreas Kipf, Per-Åke Larson, Umar Farooq Minhas, and Tim Kraska. TreeLine: an update-in-place key-value store for modern storage. *Proceedings of the VLDB Endowment*, 16(1):99–112, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561270.

Tao:2022:DPE

[3172] Yuchao Tao, Amir Gilad, Ashwin Machanavajjhala, and Sudeepa Roy.

DPXPlain: privately explaining aggregate query answers. *Proceedings of the VLDB Endowment*, 16(1):113–126, September 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3561261.3561271.

Chang:2022:EMP

[3173] Lijun Chang, Mouyi Xu, and Darren Strash. Efficient maximum k-plex computation over large sparse graphs. *Proceedings of the VLDB Endowment*, 16(2):127–139, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565817.

Hu:2022:OSE

[3174] Tianxun Hu, Tianzheng Wang, and Qingqing Zhou. Online schema evolution is (almost) free for snapshot databases. *Proceedings of the VLDB Endowment*, 16(2):140–153, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565818.

Wang:2022:LEH

[3175] Yifan Wang, Haodi Ma, and Daisy Zhe Wang. LIDER: an efficient high-dimensional learned index for large-scale dense passage retrieval. *Proceedings of the VLDB Endowment*, 16(2):154–166, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565819.

Shaham:2022:MMS

[3176] Sina Shaham, Gabriel Ghinita, and Cyrus Shahabi. Models and mechanisms for spatial data fairness. *Proceedings of the VLDB Endowment*, 16(2):167–179, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565820.

Huang:2022:IMR

[3177] Shixun Huang, Wenqing Lin, Zhifeng Bao, and Jiachen Sun. Influence maximization in real-world closed social networks. *Proceedings of the VLDB Endowment*, 16(2):180–192, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565821.

Bonifati:2022:TLI

[3178] Angela Bonifati, Francesco Del Buono, Francesco Guerra, and Donato Tiano. Time2Feat: learning interpretable representations for multivariate time series clustering. *Proceedings of the VLDB Endowment*, 16(2):193–201, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565822.

Li:2022:OVF

[3179] Xiaochen Li, Yuke Hu, Weiran Liu, Hanwen Feng, Li Peng, Yuan Hong, Kui Ren, and Zhan Qin. OpBoost: a vertical federated tree boosting framework based on order-preserving desensitization. *Proceedings of the VLDB Endowment*, 16(2):202–215, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565823.

Perera:2022:HSD

[3180] R. Malinga Perera, Bastian Oetomo, Benjamin I. P. Rubinstein, and Renata Borovica-Gajic. HMAB: self-driving hierarchy of bandits for integrated physical database design tuning.

Proceedings of the VLDB Endowment, 16(2):216–229, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565824.

Palyvos-Giannas:2022:EEO

[3181] Dimitris Palyvos-Giannas, Katerina Tzompanaki, Marina Papatriantafilou, and Vincenzo Gulisano. Erebus: explaining the outputs of data streaming queries. *Proceedings of the VLDB Endowment*, 16(2):230–242, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565825.

Zhang:2022:PPL

[3182] Zhou Zhang, Zhaole Chu, Peiquan Jin, Yongping Luo, Xike Xie, Shouhong Wan, Yun Luo, Xufei Wu, Peng Zou, Chunyang Zheng, Guoan Wu, and Andy Rudoff. PLIN: a persistent learned index for non-volatile memory with high performance and instant recovery. *Proceedings of the VLDB Endowment*, 16(2):243–255, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565826.

Wang:2022:FFC

[3183] Zuozhi Wang, Shengquan Ni, Avinash Kumar, and Chen Li. Fries: fast and consistent runtime reconfiguration in dataflow systems with transactional guarantees. *Proceedings of the VLDB Endowment*, 16(2):256–268, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565827.

Xiao:2022:FAD

[3184] Renjie Xiao, Zijing Tan, Haojin Wang, and Shuai Ma. Fast approximate denial constraint discovery. *Proceedings of the VLDB Endowment*, 16(2):269–281, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565828.

Wang:2022:FDD

[3185] Haoyu Wang and Shaoxu Song. Frequency domain data encoding in Apache IoTDB. *Proceedings of the VLDB Endowment*, 16(2):282–290, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565829.

Zheng:2022:HMS

[3186] Jiping Zheng, Yuan Ma, Wei Ma, Yanhao Wang, and Xiaoyang Wang. Happiness maximizing sets under group fairness constraints. *Proceedings of the VLDB Endowment*, 16(2):291–303, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565830.

Renggli:2022:SEF

[3187] Cedric Renggli, Xiaozhe Yao, Luka Kolar, Luka Rimanic, Ana Klimovic, and Ce Zhang. SHiFT: an efficient, flexible search engine for transfer learning. *Proceedings of the VLDB Endowment*, 16(2):304–316, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565831.

Islam:2022:SCT

[3188] Md. Mouinul Islam, Dong Wei, Baruch Schieber, and Senjuti Basu Roy. Satisfying complex top-k fairness constraints by preference substitutions. *Proceedings of the VLDB Endowment*, 16(2):317–329, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565832.

Karpov:2022:SSE

[3189] Nikolai Karpov and Qin Zhang. SyncSignature: a simple, efficient, parallelizable framework for tree similarity joins. *Proceedings of the VLDB Endowment*, 16(2):330–342, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565833.

Yang:2022:APG

[3190] Shuang Yang, Yahui Sun, Jiesong Liu, Xiaokui Xiao, Rong-Hua Li, and Zhewei Wei. Approximating probabilistic group Steiner trees in graphs. *Proceedings of the VLDB Endowment*, 16(2):343–355, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565834.

Papadias:2022:SER

[3191] Serafeim Papadias, Zoi Kaoudi, Jorge-Arnulfo Quiané-Ruiz, and Volker Markl. Space-efficient random walks on streaming graphs. *Proceedings of the VLDB Endowment*, 16(2):356–368, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565835.

Wang:2022:PPT

[3192] Pengfei Wang, Xiaocan Zeng, Lu Chen, Fan Ye, Yuren Mao, Junhao Zhu, and Yunjun Gao. PromptEM: prompt-tuning for low-resource generalized entity matching. *Proceedings of the VLDB Endowment*, 16(2):369–378, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565836.

Guo:2022:CAC

[3193] Zhihan Guo, Xinyu Zeng, Kan Wu, Wuh-Chwen Hwang, Ziwei Ren, Xiangyao Yu, Mahesh Balakrishnan, and Philip A. Bernstein. Cornus: atomic commit for a cloud DBMS with storage disaggregation. *Proceedings of the VLDB Endowment*, 16(2):379–392, October 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3565816.3565837.

Yuan:2022:RTT

[3194] Haitao Yuan, Guoliang Li, and Zhifeng Bao. Route travel time estimation on a road network revisited: Heterogeneity, proximity, periodicity and dynamicity. *Proceedings of the VLDB Endowment*, 16(3):393–405, November 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3570690.3570691.

Wu:2022:SOM

[3195] Yongji Wu, Matthew Lentz, Danyang Zhuo, and Yao Lu. Serving and optimizing machine learning workflows on heterogeneous infrastructures. *Proceedings of the VLDB Endowment*, 16(3):406–419, November 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3570690.3570692.

Geng:2022:CRB

[3196] Zixuan Geng, Maximilian Schleich, and Dan Suciu. Computing rule-based explanations by leveraging counterfactuals. *Proceedings of the VLDB*

Endowment, 16(3):420–432, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570693`.

Peng:2022:SSI

[3197] Jinfeng Peng, Derong Shen, Nan Tang, Tieying Liu, Yue Kou, Tiezheng Nie, Hang Cui, and Ge Yu. Self-supervised and interpretable data cleaning with sequence generative adversarial networks. *Proceedings of the VLDB Endowment*, 16(3):433–446, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570694`.

Romero:2022:OVA

[3198] Francisco Romero, Johann Hauswald, Aditi Partap, Daniel Kang, Matei Zaharia, and Christos Kozyrakis. Optimizing video analytics with declarative model relationships. *Proceedings of the VLDB Endowment*, 16(3):447–460, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570695`.

Jiang:2022:SRT

[3199] Jiaxin Jiang, Yuan Li, Bingsheng He, Bryan Hooi, Jia Chen, and Johan Kok Zhi Kang. Spade: a real-time fraud detection framework on evolving graphs. *Proceedings of the VLDB Endowment*, 16(3):461–469, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570696`.

Miao:2022:GET

[3200] Xupeng Miao, Yujie Wang, Youhe Jiang, Chunan Shi, Xiaonan Nie, Hailin Zhang, and Bin Cui. Galvatron: Efficient transformer training over multiple GPUs using automatic parallelism. *Proceedings of the VLDB Endowment*, 16(3):470–479, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570697`.

Wang:2022:IDL

[3201] Qitong Wang, Stephen Whitmarsh, Vincent Navarro, and Themis Palpanas. iEDeaL: a deep learning framework for detecting highly imbalanced interictal epileptiform discharges. *Proceedings of the VLDB Endowment*, 16(3):480–490, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570698`.

Zapridou:2022:DLP

[3202] Eleni Zapridou, Ioannis Mytilinis, and Anastasia Ailamaki. Dalton: Learned partitioning for distributed data streams. *Proceedings of the VLDB Endowment*, 16(3):491–504, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570699`.

Behrouz:2022:FCS

[3203] Ali Behrouz, Farnoosh Hashemi, and Laks V. S. Lakshmanan. FirmTruss community search in multilayer networks. *Proceedings of the VLDB Endowment*, 16(3):505–518, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570700`.

Xu:2022:ETC

[3204] Tianyang Xu, Zhao Lu, and Yuanyuan Zhu. Efficient triangle-connected truss community search in dynamic graphs. *Proceedings of the VLDB Endowment*, 16(3):519–531, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570701`.

Sabek:2022:CLM

[3205] Ibrahim Sabek, Kapil Vaidya, Dominik Horn, Andreas Kipf, Michael Mitzenmacher, and Tim Kraska. Can learned models replace hash functions? *Proceedings of the VLDB Endowment*, 16(3):532–545, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570702`.

Zhao:2022:TGA

[3206] Yue Zhao, George H. Chen, and Zhihao Jia. TOD: GPU-accelerated outlier detection via tensor operations. *Proceedings of the VLDB Endowment*, 16(3):546–560, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570703`.

Ma:2022:FFL

[3207] Chaohong Ma, Xiaohui Yu, Yifan Li, Xiaofeng Meng, and Aishan Maoliniyazi. FILM: a fully learned index for larger-than-memory databases. *Proceedings of the VLDB Endowment*, 16(3):561–573, November 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3570690.3570704`.

Mazmudar:2022:CMI

[3208] Miti Mazmudar, Thomas Humphries, Jiaxiang Liu, Matthew Rafuse, and Xi He. Cache me if you can: Accuracy-aware inference engine for differentially private data exploration. *Proceedings of the VLDB Endowment*, 16(4):574–586, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574246`.

Falzon:2022:RSE

[3209] Francesca Falzon, Evangelia Anna Markatou, Zachary Espiritu, and Roberto Tamassia. Range search over encrypted multi-attribute data. *Proceedings of the VLDB Endowment*, 16(4):587–600, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574247`.

Ren:2022:HMA

[3210] Xuanle Ren, Le Su, Zhen Gu, Sheng Wang, Feifei Li, Yuan Xie, Song Bian, Chao Li, and Fan Zhang. HEDA: Multi-attribute unbounded aggregation over homomorphically encrypted database. *Proceedings of the VLDB Endowment*, 16(4):601–614, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574248`.

Shen:2022:DPG

[3211] Chih-Ya Shen, Shao-Heng Ko, Guang-Siang Lee, Wang-Chien Lee, and De-Nian Yang. Density personalized group query. *Proceedings of the VLDB Endowment*, 16(4):615–628, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574249`.

Geng:2022:NDH

[3212] Jinkun Geng, Anirudh Sivaraman, Balaji Prabhakar, and Mendel Rosenblum. Nezha: Deployable and high-performance consensus using synchronized clocks. *Proceedings of the VLDB Endowment*, 16(4):629–642, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574250`.

Ahmad:2022:PPR

[3213] Ishtiyaque Ahmad, Divyakant Agrawal, Amr El Abbadi, and Trinabh Gupta. Pantheon: Private retrieval from public key–value store. *Proceedings of the VLDB Endowment*, 16(4):643–656, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574251`.

DaDalt:2022:BSV

[3214] Francesco Da Dalt, Simon Scherrer, and Adrian Perrig. Bayesian sketches for volume estimation in data streams. *Proceedings of the VLDB Endowment*, 16(4):657–669, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574252`.

Moti:2022:WWA

[3215] Moin Hussain Moti, Panagiotis Simatis, and Dimitris Papadias. Waffle: a workload-aware and query-sensitive framework for disk-based spatial indexing. *Proceedings of the VLDB Endowment*, 16(4):670–683, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574253`.

Pena:2022:FAD

[3216] Eduardo H. M. Pena, Fabio Porto, and Felix Naumann. Fast algorithms for denial constraint discovery. *Proceedings of the VLDB Endowment*, 16(4):684–696, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574254`.

Jiao:2022:TQI

[3217] Pu Jiao, Sheng Di, Hanqi Guo, Kai Zhao, Jiannan Tian, Dingwen Tao, Xin Liang, and Franck Cappello. Toward quantity-of-interest preserving lossy compression for scientific data. *Proceedings of the VLDB Endowment*, 16(4):697–710, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574255`.

Demirci:2022:SGC

[3218] Gunduz Vehbi Demirci, Aparajita Haldar, and Hakan Ferhatosmanoglu. Scalable graph convolutional network training on distributed-memory systems. *Proceedings of the VLDB Endowment*, 16(4):711–724, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574256`.

Schafer:2022:MSA

[3219] Patrick Schäfer and Ulf Leser. Motiflets: Simple and accurate detection of motifs in time series. *Proceedings of the VLDB Endowment*, 16(4):725–737, December 2022. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3574245.3574257`.

Narayan:2022:CFM

[3220] Avanika Narayan, Ines Chami, Laurel Orr, and Christopher Ré. Can foundation models wrangle your data? *Proceedings of the VLDB Endowment*, 16 (4):738–746, December 2022. CODEN ???? ISSN 2150-8097. URL `https://`

dl.acm.org/doi/10.14778/3574245.3574258.

Kim:2022:MDB

[3221] Bogyeong Kim, Kyoseung Koo, Undraa Enkhbat, Sohyun Kim, Juhun Kim, and Bongki Moon. M2Bench: a database benchmark for multi-model analytic workloads. *Proceedings of the VLDB Endowment*, 16(4):747–759, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574259.

Baruah:2022:POD

[3222] Nirvik Baruah, Peter Kraft, Fiodar Kazhamiaka, Peter Bailis, and Matei Zaharia. Parallelism-optimizing data placement for faster data-parallel computations. *Proceedings of the VLDB Endowment*, 16(4):760–771, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574260.

Lazebnik:2022:SSB

[3223] Teddy Lazebnik, Amit Somech, and Abraham Itzhak Weinberg. SubStrat: a subset-based optimization strategy for faster AutoML. *Proceedings of the VLDB Endowment*, 16(4):772–780, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574261.

Gurukar:2022:MWS

[3224] Saket Gurukar, Nikil Pancha, Andrew Zhai, Eric Kim, Samson Hu, Srinivasan Parthasarathy, Charles Rosenberg, and Jure Leskovec. MultiBiSage: a Web-scale recommendation system using multiple bipartite graphs at Pinterest. *Proceedings of the VLDB Endowment*, 16(4):781–789, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574262.

Zeakis:2022:TEF

[3225] Alexandros Zeakis, Dimitrios Skoutas, Dimitris Sacharidis, Odysseas Papapetrou, and Manolis Koubarakis. TokenJoin: Efficient filtering for set similarity join with maximum weighted bipartite matching. *Proceedings of the VLDB Endowment*, 16(4):790–802, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574263.

Kayali:2022:QSC

[3226] Moe Kayali and Dan Suciu. Quasi-stable coloring for graph compression: Approximating max-flow, linear programs, and centrality. *Proceedings of the VLDB Endowment*, 16(4):803–815, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574264.

Pujol:2022:MAD

[3227] David Pujol, Albert Sun, Brandon Fain, and Ashwin Machanavajjhala. Multi-analyst differential privacy for online query answering. *Proceedings of the VLDB Endowment*, 16(4):816–828, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574265.

Gubner:2022:EVM

[3228] Tim Gubner and Peter Boncz. Excalibur: a virtual machine for adaptive fine-grained JIT-compiled query execution based on VOILA. *Proceedings of the VLDB Endowment*, 16(4):

829–841, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574266.

Qin:2022:ADO

[3229] Lianke Qin, Rajesh Jayaram, Elaine Shi, Zhao Song, Danyang Zhuo, and Shumo Chu. Adore: Differentially oblivious relational database operators. *Proceedings of the VLDB Endowment*, 16(4):842–855, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574267.

Laddad:2022:KCC

[3230] Shadaj Laddad, Conor Power, Mae Milano, Alvin Cheung, Natacha Crooks, and Joseph M. Hellerstein. Keep CALM and CRDT on. *Proceedings of the VLDB Endowment*, 16(4):856–863, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574268.

Lu:2022:MLS

[3231] Kejing Lu, Yoshiharu Ishikawa, and Chuan Xiao. MQH: Locality sensitive hashing on multi-level quantization errors for point-to-hyperplane distances. *Proceedings of the VLDB Endowment*, 16(4):864–876, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574269.

Szarnyas:2022:LSN

[3232] Gábor Szárnyas, Jack Waudby, Benjamin A. Steer, Dávid Szakállas, Altan Birler, Mingxi Wu, Yuchen Zhang, and Peter Boncz. The LDBC social network benchmark: Business intelligence workload. *Proceedings of the VLDB Endowment*, 16(4):877–890, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574270.

An:2022:MCM

[3233] Shuai An and Yang Cao. Making cache monotonic and consistent. *Proceedings of the VLDB Endowment*, 16(4):891–904, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574271.

Wei:2022:SPE

[3234] Ziyun Wei and Immanuel Trummer. SkinnerMT: Parallelizing for efficiency and robustness in adaptive query processing on multicore platforms. *Proceedings of the VLDB Endowment*, 16(4):905–917, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574272.

Ding:2022:EAQ

[3235] Dujian Ding, Sihem Amer-Yahia, and Laks Lakshmanan. On efficient approximate queries over machine learning models. *Proceedings of the VLDB Endowment*, 16(4):918–931, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574273.

Khatiwada:2022:IDL

[3236] Aamod Khatiwada, Roee Shraga, Wolfgang Gatterbauer, and Renée J. Miller. Integrating data lake tables. *Proceedings of the VLDB Endowment*, 16(4):932–945, December 2022. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3574245.3574274.

Kang:2022:PTS

[3237] Hongbo Kang, Yiwei Zhao, Guy E. Blelloch, Laxman Dhulipala, Yan Gu, Charles McGuffey, and Phillip B. Gibbons. PIM-Tree: a skew-resistant index for processing-in-memory. *Proceedings of the VLDB Endowment*, 16 (4):946–958, December 2022. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3574245.3574275.

Chen:2022:WRE

[3238] Zhijia Chen, Weiyi Meng, and Eduard Dragut. Web record extraction with invariants. *Proceedings of the VLDB Endowment*, 16(4):959–972, December 2022. CODEN ???? ISSN 2150-8097.

Wang:2022:DGM

[3239] Yong Wang, Guoliang Li, Kaiyu Li, and Haitao Yuan. A deep generative model for trajectory modeling and utilization. *Proceedings of the VLDB Endowment*, 16(4):973–985, December 2022. CODEN ???? ISSN 2150-8097.

Xu:2022:LTH

[3240] Zihuan Xu and Lei Chen. L2chain: Towards high-performance, confidential and secure layer-2 blockchain solution for decentralized applications. *Proceedings of the VLDB Endowment*, 16(4): 986–999, December 2022. CODEN ???? ISSN 2150-8097.

Li:2023:ATR

[3241] Mingxuan Li, Yazhe Wang, Shuai Ma, Chao Liu, Dongdong Huo, Yu Wang, and Zhen Xu. Auto-tuning with reinforcement learning for permissioned blockchain systems. *Proceedings of the VLDB Endowment*, 16(5):1000–1012, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579076.

Xie:2023:PSH

[3242] Minhui Xie, Youyou Lu, Qing Wang, Yangyang Feng, Jiaqiang Liu, Kai Ren, and Jiwu Shu. PetPS: Supporting huge embedding models with persistent memory. *Proceedings of the VLDB Endowment*, 16(5):1013–1022, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579077.

Rabbani:2023:EVS

[3243] Kashif Rabbani, Matteo Lissandrini, and Katja Hose. Extraction of validating shapes from very large knowledge graphs. *Proceedings of the VLDB Endowment*, 16(5):1023–1032, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579078.

Pang:2023:AFM

[3244] Pu Pang, Gang Deng, Kaihao Bai, Quan Chen, Shixuan Sun, Bo Liu, Yu Xu, Hongbo Yao, Zhengheng Wang, Xiyu Wang, Zheng Liu, Zhuo Song, Yong Yang, Tao Ma, and Minyi Guo. Async-Fork: Mitigating query latency spikes incurred by the fork-based snapshot mechanism from the OS level. *Proceedings of the VLDB Endowment*, 16(5):1033–1045, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579079.

Wang:2023:CPJ

[3245] Qichen Wang, Xiao Hu, Binyang Dai, and Ke Yi. Change propagation without joins. *Proceedings of the VLDB Endowment*, 16(5):1046–1058, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579080.

Xie:2023:FFF

[3246] Yuexiang Xie, Zhen Wang, Dawei Gao, Daoyuan Chen, Liuyi Yao, Weirui Kuang, Yaliang Li, Bolin Ding, and Jingren Zhou. FederatedScope: a flexible federated learning platform for heterogeneity. *Proceedings of the VLDB Endowment*, 16(5):1059–1072, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579081.

Li:2023:AAC

[3247] Boyang Li, Yurong Cheng, Ye Yuan, Yi Yang, QianQian Jin, and Guoren Wang. ACTA: Autonomy and coordination task assignment in spatial crowdsourcing platforms. *Proceedings of the VLDB Endowment*, 16(5):1073–1085, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579082.

Um:2023:FAD

[3248] Taegeon Um, Byungsoo Oh, Byeongchan Seo, Minhyeok Kweun, Goeun Kim, and Woo-Yeon Lee. FastFlow: Accelerating deep learning model training with smart offloading of input data pipeline. *Proceedings of the VLDB Endowment*, 16(5):1086–1099, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579083.

Zhao:2023:FFM

[3249] Xi Zhao, Bolong Zheng, Xiaomeng Yi, Xiaofan Luan, Charles Xie, Xiaofang Zhou, and Christian S. Jensen. FARGO: Fast maximum inner product search via global multi-probing. *Proceedings of the VLDB Endowment*, 16(5):1100–1112, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579084.

Kiefer:2023:ODP

[3250] Martin Kiefer, Ilias Poulakis, Eleni Tzirita Zacharatou, and Volker Markl. Optimistic data parallelism for FPGA-accelerated sketching. *Proceedings of the VLDB Endowment*, 16(5):1113–1125, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579085.

Arcolezi:2023:RCM

[3251] Héber H. Arcolezi, Sébastien Gambs, Jean-François Couchot, and Catuscia Palamidessi. On the risks of collecting multidimensional data under local differential privacy. *Proceedings of the VLDB Endowment*, 16(5):1126–1139, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579086.

Chatzakis:2023:OJL

[3252] Manos Chatzakis, Panagiota Fatourou, Eleftherios Kosmas, Themis Palpanas, and Botao Peng. Odyssey: a journey in the land of distributed data series similarity search. *Proceedings of the VLDB*

Endowment, 16(5):1140–1153, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579087.

Fang:2023:AER

[3253] Lanting Fang, Kaiyu Feng, Jie Gui, Shanshan Feng, and Aiqun Hu. Anonymous edge representation for inductive anomaly detection in dynamic bipartite graph. *Proceedings of the VLDB Endowment*, 16(5):1154–1167, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579088.

Yang:2023:STR

[3254] Junyong Yang, Ming Zhong, Yuanyuan Zhu, Tieyun Qian, Mengchi Liu, and Jeffrey Xu Yu. Scalable time-range k-core query on temporal graphs. *Proceedings of the VLDB Endowment*, 16(5):1168–1180, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579089.

Zhu:2023:HPR

[3255] Erkang Zhu, Silu Huang, and Surajit Chaudhuri. High-performance row pattern recognition using joins. *Proceedings of the VLDB Endowment*, 16(5):1181–1195, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579090.

Luo:2023:HGA

[3256] Kelin Luo, Alexandre M. Florio, Syamantak Das, and Xiangyu Guo. A hierarchical grouping algorithm for the multi-vehicle dial-a-ride problem. *Proceedings of the VLDB Endowment*, 16(5):1195–1207, January 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3579075.3579091.

Liu:2023:LAD

[3257] Xiaoxuan Liu, Shuxian Wang, Mengzhu Sun, Sicheng Pan, Ge Li, Siddharth Jha, Cong Yan, Junwen Yang, Shan Lu, and Alvin Cheung. Leveraging application data constraints to optimize database-backed Web applications. *Proceedings of the VLDB Endowment*, 16(6):1208–1221, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583141.

Gruber:2023:BCD

[3258] Ferdinand Gruber, Maximilian Bandle, Alexis Engelke, Thomas Neumann, and Jana Giceva. Bringing compiling databases to RISC architectures. *Proceedings of the VLDB Endowment*, 16(6):1222–1234, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583142.

Cha:2023:BLH

[3259] Hokeun Cha, Xiangpeng Hao, Tianzheng Wang, Huanchen Zhang, Aditya Akella, and Xiangyao Yu. B^{link}-hash: an adaptive hybrid index for in-memory time-series databases. *Proceedings of the VLDB Endowment*, 16(6):1235–1248, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583143.

Huang:2023:DSE

[3260] Wentao Huang, Yunhong Ji, Xuan Zhou, Bingsheng He, and Kian-Lee Tan. A design space exploration and evaluation for main-memory hash joins in storage class memory. *Proceedings of the VLDB Endowment*, 16(6): 1249–1263, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583144.

Huang:2023:EBB

[3261] Kaile Huang, Si Liu, Zhenge Chen, Hengfeng Wei, David Basin, Haixiang Li, and Anqun Pan. Efficient black-box checking of snapshot isolation in databases. *Proceedings of the VLDB Endowment*, 16(6):1264–1276, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583145.

Li:2023:DPV

[3262] Zitao Li, Tianhao Wang, and Ninghui Li. Differentially private vertical federated clustering. *Proceedings of the VLDB Endowment*, 16(6):1277–1290, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583146.

Zhao:2023:PCT

[3263] Fuheng Zhao, Punnal Ismail Khan, Divyakant Agrawal, Amr El Abbadi, Arpit Gupta, and Zaoxing Liu. Panakos: Chasing the tails for multidimensional data streams. *Proceedings of the VLDB Endowment*, 16(6): 1291–1304, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583147.

Furst:2023:VOM

[3264] Jonathan Fürst, Mauricio Fadel Argerich, and Bin Cheng. VersaMatch: Ontology matching with weak supervision. *Proceedings of the VLDB Endowment*, 16(6):1305–1318, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583148.

Sun:2023:RRT

[3265] Yushi Sun, Hao Xin, and Lei Chen. RECA: Related tables enhanced column semantic type annotation framework. *Proceedings of the VLDB Endowment*, 16(6):1319–1331, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583149.

Li:2023:ZWT

[3266] Yiming Li, Yanyan Shen, Lei Chen, and Mingxuan Yuan. Zebra: When temporal graph neural networks meet temporal personalized PageRank. *Proceedings of the VLDB Endowment*, 16(6): 1332–1345, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583150.

Feng:2023:EAC

[3267] Su Feng, Boris Glavic, and Oliver Kennedy. Efficient approximation of certain and possible answers for ranking and window queries over uncertain data. *Proceedings of the VLDB Endowment*, 16(6):1346–1358, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583151.

Yue:2023:GEV

[3268] Cong Yue, Tien Tuan Anh Dinh, Zhongle Xie, Meihui Zhang, Gang Chen, Beng Chin Ooi, and Xiaokui Xiao. GlassDB: an efficient verifiable ledger database system through transparency. *Proceedings of the VLDB Endowment*, 16(6):1359–1371, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583152.

Zhang:2023:EDT

[3269] Qian Zhang, Jingyao Li, Hongyao Zhao, Quanqing Xu, Wei Lu, Jinliang Xiao, Fusheng Han, Chuanhui Yang, and Xiaoyong Du. Efficient distributed transaction processing in heterogeneous networks. *Proceedings of the VLDB Endowment*, 16(6):1372–1385, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583153.

Jiang:2023:ASE

[3270] Zhiguo Jiang, Hanhua Chen, and Hai Jin. Auxo: a scalable and efficient graph stream summarization structure. *Proceedings of the VLDB Endowment*, 16(6):1386–1398, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583154.

He:2023:OOS

[3271] Xiao He, Ye Li, Jian Tan, Bin Wu, and Feifei Li. OneShotSTL: One-shot seasonal-trend decomposition for online time series anomaly detection and forecasting. *Proceedings of the VLDB Endowment*, 16(6):1399–1412, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583155.

vanRenen:2023:CAB

[3272] Alexander van Renen and Viktor Leis. Cloud analytics benchmark. *Proceedings of the VLDB Endowment*, 16(6):1413–1425, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583156.

Alhomssi:2023:SRS

[3273] Adnan Alhomssi and Viktor Leis. Scalable and robust snapshot isolation for high-performance storage engines. *Proceedings of the VLDB Endowment*, 16(6):1426–1438, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583157.

Li:2023:FFS

[3274] Xiang Li, Fabing Li, and Mingyu Gao. Flare: a fast, secure, and memory-efficient distributed analytics framework. *Proceedings of the VLDB Endowment*, 16(6):1439–1452, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583158.

An:2023:NSB

[3275] Mijin An, Jonghyeok Park, Tianzheng Wang, Beomseok Nam, and Sang-Won Lee. NV-SQL: Boosting OLTP performance with non-volatile DIMMs. *Proceedings of the VLDB Endowment*, 16(6):1453–1465, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583159.

Zhu:2023:LLR

[3276] Rong Zhu, Wei Chen, Bolin Ding, Xingguang Chen, Andreas Pfadler, Ziniu Wu, and Jingren Zhou. Lero: a learning-to-rank query optimizer. *Proceedings of the VLDB Endowment*, 16

(6):1466–1479, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583160.

Lee:2023:DCS

[3277] Kitaek Lee, Insoon Jo, Jaechan Ahn, Hyuk Lee, Hwang Lee, Woong Sul, and Hyungsoo Jung. Deploying computational storage for HTAP DBMSs takes more than just computation offloading. *Proceedings of the VLDB Endowment*, 16(6):1480–1493, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583161.

Tang:2023:TPC

[3278] Dixin Tang, Alan Fekete, Indranil Gupta, and Aditya G. Parameswaran. Transactional panorama: a conceptual framework for user perception in analytical visual interfaces. *Proceedings of the VLDB Endowment*, 16(6):1494–1506, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583162.

Paulsen:2023:SSY

[3279] Derek Paulsen, Yash Govind, and An-Hai Doan. Sparkly: a simple yet surprisingly strong TF/IDF blocker for entity matching. *Proceedings of the VLDB Endowment*, 16(6):1507–1519, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583163.

Negi:2023:RQD

[3280] Parimarjan Negi, Ziniu Wu, Andreas Kipf, Nesime Tatbul, Ryan Marcus, Sam Madden, Tim Kraska, and Mohammad Alizadeh. Robust query driven cardinality estimation under changing workloads. *Proceedings of the VLDB Endowment*, 16(6):1520–1533, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583164.

Fu:2023:CTR

[3281] Han Fu, Chang Liu, Bin Wu, Feifei Li, Jian Tan, and Jianling Sun. CatSQL: Towards real world natural language to SQL applications. *Proceedings of the VLDB Endowment*, 16(6):1534–1547, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583165.

Azizi:2023:EGB

[3282] Ilias Azizi, Karima Echihabi, and Themis Palpanas. ELPIS: Graph-based similarity search for scalable data science. *Proceedings of the VLDB Endowment*, 16(6):1548–1559, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583166.

Duffy:2023:DKV

[3283] Carl Duffy, Jaehoon Shim, Sang-Hoon Kim, and Jin-Soo Kim. Dotori: a key–value SSD based KV store. *Proceedings of the VLDB Endowment*, 16(6):1560–1572, February 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3583140.3583167.

Pujol:2023:PPG

[3284] David Pujol, Amir Gilad, and Ashwin Machanavajjhala. PreFair: Privately generating justifiably fair synthetic data. *Proceedings of the VLDB Endowment*, 16(6):1573–1586, February 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3583140.3583168`.

Shraga:2023:EDC

[3285] Roee Shraga and Renée J. Miller. Explaining dataset changes for semantic data versioning with Explain-Da-V. *Proceedings of the VLDB Endowment*, 16(6):1587–1600, February 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3583140.3583169`.

Budiu:2023:DAI

[3286] Mihai Budiu, Tej Chajed, Frank McSherry, Leonid Ryzhyk, and Val Tannen. DBSP: Automatic incremental view maintenance for rich query languages. *Proceedings of the VLDB Endowment*, 16(7):1601–1614, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587137`.

Liang:2023:SSP

[3287] Ling Liang, Jilan Lin, Zheng Qu, Ishtiyaque Ahmad, Fengbin Tu, Trinabh Gupta, Yufei Ding, and Yuan Xie. SPG: Structure-private graph database via SqueezePIR. *Proceedings of the VLDB Endowment*, 16(7):1615–1628, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587138`.

Zhang:2023:IES

[3288] Jingyuan Zhang, Ao Wang, Xiaolong Ma, Benjamin Carver, Nicholas John Newman, Ali Anwar, Lukas Rupprecht, Vasily Tarasov, Dimitrios Skourtis, Feng Yan, and Yue Cheng. InfiniStore: Elastic serverless cloud storage. *Proceedings of the VLDB Endowment*, 16(7):1629–1642, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587139`.

Fang:2023:DGE

[3289] Peng Fang, Arijit Khan, Siqiang Luo, Fang Wang, Dan Feng, Zhenli Li, Wei Yin, and Yuchao Cao. Distributed graph embedding with information-oriented random walks. *Proceedings of the VLDB Endowment*, 16(7):1643–1656, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587140`.

Zheng:2023:SSV

[3290] Shuyuan Zheng, Yang Cao, and Masatoshi Yoshikawa. Secure Shapley value for cross-silo federated learning. *Proceedings of the VLDB Endowment*, 16(7):1657–1670, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587141`.

Li:2023:SSF

[3291] Xiang Li, Nuozhou Sun, Yunqian Luo, and Mingyu Gao. SODA: a set of fast oblivious algorithms in distributed secure data analytics. *Proceedings of the VLDB Endowment*, 16(7):1671–1684, March 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3587136.3587142`.

Hong:2023:GSB

[3292] Zicong Hong, Song Guo, Enyuan Zhou, Wuhui Chen, Huawei Huang, and Albert Zomaya. GriDB: Scaling blockchain database via sharding and off-chain cross-shard mechanism. *Proceedings of the VLDB Endowment*, 16(7):1685–1698, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587143.

Jian:2023:SAS

[3293] Xun Jian, Zhiyuan Li, and Lei Chen. SUFF: Accelerating subgraph matching with historical data. *Proceedings of the VLDB Endowment*, 16 (7):1699–1711, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587144.

He:2023:WDM

[3294] Haochen He, Erci Xu, Shanshan Li, Zhouyang Jia, Si Zheng, Yue Yu, Jun Ma, and Xiangke Liao. When database meets new storage devices: Understanding and exposing performance mismatches via configurations. *Proceedings of the VLDB Endowment*, 16(7):1712–1725, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587145.

Fan:2023:SAD

[3295] Grace Fan, Jin Wang, Yuliang Li, Dan Zhang, and Renée J. Miller. Semantics-aware dataset discovery from data lakes with contextualized column-based representation learning. *Proceedings of the VLDB Endowment*, 16(7):1726–1739, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587146.

Mortensen:2023:MEM

[3296] Kasper Overgaard Mortensen, Fatemeh Zardbani, Mohammad Ahsanul Haque, Steinn Ymir Agustsson, Davide Mottin, Philip Hofmann, and Panagiotis Karras. Marigold: Efficient k-means clustering in high dimensions. *Proceedings of the VLDB Endowment*, 16(7):1740–1748, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587147.

Sabek:2023:CLM

[3297] Ibrahim Sabek and Tim Kraska. The case for learned in-memory joins. *Proceedings of the VLDB Endowment*, 16 (7):1749–1762, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587148.

Li:2023:EEB

[3298] Ruiyuan Li, Zheng Li, Yi Wu, Chao Chen, and Yu Zheng. Elf: Erasing-based lossless floating-point compression. *Proceedings of the VLDB Endowment*, 16(7):1763–1776, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587149.

Chen:2023:LLO

[3299] Tianyi Chen, Jun Gao, Hedui Chen, and Yaofeng Tu. LOGER: a learned optimizer towards generating efficient and robust query execution plans. *Proceedings of the VLDB Endowment*, 16 (7):1777–1789, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587150.

Martens:2023:RPG

[3300] Wim Martens, Matthias Niewerth, Tina Popp, Carlos Rojas, Stijn Vansummeren, and Domagoj Vrgoc. Representing paths in graph database pattern matching. *Proceedings of the VLDB Endowment*, 16(7):1790–1803, March 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3587136.3587151.

Li:2023:ZVE

[3301] Xiling Li, Chenkai Weng, Yongxin Xu, Xiao Wang, and Jennie Rogers. ZKSQL: Verifiable and efficient query evaluation with zero-knowledge proofs. *Proceedings of the VLDB Endowment*, 16(8):1804–1816, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594513.

Piao:2023:CGE

[3302] Chengzhi Piao, Tingyang Xu, Xiangguo Sun, Yu Rong, Kangfei Zhao, and Hong Cheng. Computing graph edit distance via neural graph matching. *Proceedings of the VLDB Endowment*, 16(8):1817–1829, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594514.

Schaler:2023:BUE

[3303] Christine Schäler, Thomas Hütter, and Martin Schäler. Benchmarking the utility of w-event differential privacy mechanisms — when baselines become mighty competitors. *Proceedings of the VLDB Endowment*, 16(8):1830–1842, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594515.

Augustine:2023:CGA

[3304] Eriq Augustine and Lise Getoor. Collective grounding: Applying database techniques to grounding templated models. *Proceedings of the VLDB Endowment*, 16(8):1843–1855, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594516.

Adams:2023:EEP

[3305] Jan Niklas Adams, Cameron Pitsch, Tobias Brockhoff, and Wil M. P. van der Aalst. An experimental evaluation of process concept drift detection. *Proceedings of the VLDB Endowment*, 16(8):1856–1869, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594517.

Vitagliano:2023:PDL

[3306] Gerardo Vitagliano, Mazhar Hameed, Lan Jiang, Lucas Reisener, Eugene Wu, and Felix Naumann. Pollock: a data loading benchmark. *Proceedings of the VLDB Endowment*, 16(8):1870–1882, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594518.

Xiao:2023:APL

[3307] Yingtai Xiao, Guanhong Wang, Danfeng Zhang, and Daniel Kifer. Answering private linear queries adaptively using the common mechanism. *Proceedings of the VLDB Endowment*, 16(8):1883–1896, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594519.

Du:2023:LLD

[3308] Yuntao Du, Yujia Hu, Zhikun Zhang, Ziquan Fang, Lu Chen, Baihua Zheng, and Yunjun Gao. LDPTrace: Locally differentially private trajectory synthesis. *Proceedings of the VLDB Endowment*, 16(8):1897–1909, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594520.

Kitsios:2023:SPH

[3309] Xenophon Kitsios, Panagiotis Liakos, Katia Papakonstantinopoulou, and Yannis Kotidis. Sim-Piece: Highly accurate piecewise linear approximation through similar segment merging. *Proceedings of the VLDB Endowment*, 16 (8):1910–1922, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594521.

Marinelli:2023:TMF

[3310] Eugenio Marinelli, Yiqing Yan, Virginie Magnone, Charlotte Dumargne, Pascal Barbry, Thomas Heinis, and Raja Appuswamy. Towards migration-free "Just-in-Case" data archival for future cloud data lakes using synthetic DNA. *Proceedings of the VLDB Endowment*, 16(8):1923–1929, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594522.

Dong:2023:FGR

[3311] Zhiyuan Dong, Zhaoguo Wang, Xiaodong Zhang, Xian Xu, Changgeng Zhao, Haibo Chen, Aurojit Panda, and Jinyang Li. Fine-grained re-execution for efficient batched commit of distributed transactions. *Proceedings of the VLDB Endowment*, 16 (8):1930–1943, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594523.

Fan:2023:LDT

[3312] Wenfei Fan, Resul Tugay, Yaoshu Wang, Min Xie, and Muhammad Asif Ali. Learning and deducing temporal orders. *Proceedings of the VLDB Endowment*, 16(8):1944–1957, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594524.

Chen:2023:BBG

[3313] Xu Chen, Zhen Wang, Shuncheng Liu, Yaliang Li, Kai Zeng, Bolin Ding, Jingren Zhou, Han Su, and Kai Zheng. BASE: Bridging the gap between cost and latency for query optimization. *Proceedings of the VLDB Endowment*, 16(8):1958–1966, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594525.

Lemiesz:2023:EFO

[3314] Jakub Lemiesz. Efficient framework for operating on data sketches. *Proceedings of the VLDB Endowment*, 16 (8):1967–1978, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594526.

Zhao:2023:TEI

[3315] Xi Zhao, Yao Tian, Kai Huang, Bolong Zheng, and Xiaofang Zhou. Towards efficient index construction and approximate nearest neighbor search in high-dimensional spaces. *Proceedings of the VLDB Endowment*, 16(8):1979–1991, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594527.

Sun:2023:LIC

[3316] Zhaoyan Sun, Xuanhe Zhou, and Guoliang Li. Learned index: a comprehensive experimental evaluation. *Proceedings of the VLDB Endowment*, 16(8):1992–2004, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594528.

Zhang:2023:LIG

[3317] Yanping Zhang, Johes Bater, Kartik Nayak, and Ashwin Machanavajjhala. Longshot: Indexing growing databases using MPC and differential privacy. *Proceedings of the VLDB Endowment*, 16(8):2005–2018, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594529.

Paparrizos:2023:ASS

[3318] John Paparrizos, Kaize Wu, Aaron Elmore, Christos Faloutsos, and Michael J. Franklin. Accelerating similarity search for elastic measures: a study and new generalization of lower bounding distances. *Proceedings of the VLDB Endowment*, 16(8):2019–2032, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594530.

Wu:2023:ALA

[3319] Chenyuan Wu, Bhavana Mehta, Mohammad Javad Amiri, Ryan Marcus, and Boon Thau Loo. AdaChain: a learned adaptive blockchain. *Proceedings of the VLDB Endowment*, 16(8):2033–2046, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594531.

Zhou:2023:ICS

[3320] Yingli Zhou, Yixiang Fang, Wensheng Luo, and Yunming Ye. Influential community search over large heterogeneous information networks. *Proceedings of the VLDB Endowment*, 16(8):2047–2060, April 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3594512.3594532.

Arafat:2023:NBH

[3321] Naheed Anjum Arafat, Arijit Khan, Arpit Kumar Rai, and Bishwamittra Ghosh. Neighborhood-based hypergraph core decomposition. *Proceedings of the VLDB Endowment*, 16(9):2061–2074, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598582.

Layne:2023:TSG

[3322] Janet Layne, Justin Carpenter, Edoardo Serra, and Francesco Gullo. Temporal SIR-GN: Efficient and effective structural representation learning for temporal graphs. *Proceedings of the VLDB Endowment*, 16(9):2075–2089, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598583.

Haas:2023:WMN

[3323] Gabriel Haas and Viktor Leis. What modern NVMe storage can do, and how to exploit it: High-performance I/O for high-performance storage engines. *Proceedings of the VLDB Endowment*, 16(9):2090–2102, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598584.

Banakar:2023:WES

[3324] Vinay Banakar, Kan Wu, Yuvraj Patel, Kimberly Keeton, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. WiscSort: External sorting for byte-addressable storage. *Proceedings of the VLDB Endowment*, 16 (9):2103–2116, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598585.

Ayad:2023:TIL

[3325] Lorraine A. K. Ayad, Grigorios Loukides, and Solon P. Pissis. Text indexing for long patterns: Anchors are all you need. *Proceedings of the VLDB Endowment*, 16(9):2117–2131, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598586.

Afroozeh:2023:FCL

[3326] Azim Afroozeh and Peter Boncz. The FastLanes compression layout: Decoding > 100 billion integers per second with scalar code. *Proceedings of the VLDB Endowment*, 16(9):2132–2144, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598587.

Yue:2023:VAP

[3327] Cong Yue, Meihui Zhang, Changhao Zhu, Gang Chen, Dumitrel Loghin, and Beng Chin Ooi. VeriBench: Analyzing the performance of database systems with verifiability. *Proceedings of the VLDB Endowment*, 16(9):2145–2157, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598588.

Li:2023:TDL

[3328] Jiangneng Li, Zheng Wang, Gao Cong, Cheng Long, Han Mao Kiah, and Bin Cui. Towards designing and learning piecewise space-filling curves. *Proceedings of the VLDB Endowment*, 16(9):2158–2171, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598589.

Zhu:2023:MQB

[3329] Xiaoke Zhu, Yang Liu, Shuhao Liu, and Wenfei Fan. MiniGraph: Querying big graphs with a single machine. *Proceedings of the VLDB Endowment*, 16(9):2172–2185, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598590.

Choi:2023:BEC

[3330] Yunyoung Choi, Kunsoo Park, and Hyunjoon Kim. BICE: Exploring compact search space by using bipartite matching and cell-wide verification. *Proceedings of the VLDB Endowment*, 16(9):2186–2198, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598591.

Tian:2023:MDT

[3331] Anxin Tian, Alexander Zhou, Yue Wang, and Lei Chen. Maximal D-truss search in dynamic directed graphs. *Proceedings of the VLDB Endowment*, 16(9):2199–2211, May 2023. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3598581.3598592.

Li:2023:DDD

[3332] Pengfei Li, Hua Lu, Rong Zhu, Bolin Ding, Long Yang, and Gang Pan. DILI: a distribution-driven learned index. *Proceedings of the VLDB Endowment*, 16(9):2212–2224, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598593.

Zeakis:2023:PTE

[3333] Alexandros Zeakis, George Papadakis, Dimitrios Skoutas, and Manolis Koubarakis. Pre-trained embeddings for entity resolution: an experimental analysis. *Proceedings of the VLDB Endowment*, 16(9):2225–2238, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598594.

Zheng:2023:DGN

[3334] Yanping Zheng, Zhewei Wei, and Jiajun Liu. Decoupled graph neural networks for large dynamic graphs. *Proceedings of the VLDB Endowment*, 16(9):2239–2247, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598595.

Zardbani:2023:AIO

[3335] Fatemeh Zardbani, Nikos Mamoulis, Stratos Idreos, and Panagiotis Karras. Adaptive indexing of objects with spatial extent. *Proceedings of the VLDB Endowment*, 16(9):2248–2260, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598596.

Chen:2023:LNF

[3336] Xu Chen, Haitian Chen, Zibo Liang, Shuncheng Liu, Jinghong Wang, Kai Zeng, Han Su, and Kai Zheng. LEON: a new framework for ML-aided query optimization. *Proceedings of the VLDB Endowment*, 16(9):2261–2273, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598597.

Faria:2023:TIT

[3337] Nuno Faria, José Pereira, Ana Nunes Alonso, Ricardo Vilaça, Yunus Koning, and Niels Nes. TiQuE: Improving the transactional performance of analytical systems for true hybrid workloads. *Proceedings of the VLDB Endowment*, 16(9):2274–2288, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598598.

Bang:2023:SRQ

[3338] Jaeho Bang, Gaurav Tarlok Kakkar, Pramod Chunduri, Subrata Mitra, and Joy Arulraj. Seiden: Revisiting query processing in video database systems. *Proceedings of the VLDB Endowment*, 16(9):2289–2301, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598599.

Kossmann:2023:ETL

[3339] Ferdi Kossmann, Ziniu Wu, Eugenie Lai, Nesime Tatbul, Lei Cao, Tim Kraska, and Sam Madden. Extract-transform-load for video streams. *Proceedings of the VLDB Endowment*, 16(9):2302–2315, May 2023. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3598581.3598600.

Sudhir:2023:PED

[3340] Sivaprasad Sudhir, Wenbo Tao, Nikolay Laptev, Cyrille Habis, Michael Cafarella, and Samuel Madden. Pando: Enhanced data skipping with logical data partitioning. *Proceedings of the VLDB Endowment*, 16(9):2316–2329, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598601.

Maliszewski:2023:CLJ

[3341] Kajetan Maliszewski, Jorge-Arnulfo Quiané-Ruiz, and Volker Markl. Cracking-like join for trusted execution environments. *Proceedings of the VLDB Endowment*, 16(9):2330–2343, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598602.

Calikyilmaz:2023:OQA

[3342] Umut Çalikyilmaz, Sven Groppe, Jinghua Groppe, Tobias Winker, Stefan Prestel, Farida Shagieva, Daanish Arya, Florian Preis, and Le Gruenwald. Opportunities for quantum acceleration of databases: Optimization of queries and transaction schedules. *Proceedings of the VLDB Endowment*, 16(9):2344–2353, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598603.

Miao:2023:SSD

[3343] Xupeng Miao, Yining Shi, Zhi Yang, Bin Cui, and Zhihao Jia. SDPipe: a semi-decentralized framework for heterogeneity-aware pipeline-parallel training. *Proceedings of the VLDB Endowment*, 16(9):2354–2363, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598604.

Lee:2023:LCP

[3344] Bohyun Lee, Mijin An, and Sang-Won Lee. LRU-C: Parallelizing database I/Os for flash SSDs. *Proceedings of the VLDB Endowment*, 16(9):2364–2376, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598605.

Chen:2023:WYF

[3345] Zixuan Chen, Panagiotis Manolios, and Mirek Riedewald. Why not yet: Fixing a top-k ranking that is not fair to individuals. *Proceedings of the VLDB Endowment*, 16(9):2377–2390, May 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3598581.3598606.

Sharma:2023:ITS

[3346] Shantanu Sharma, Yin Li, Sharad Mehrotra, Nisha Panwar, Komal Kumari, and Swagnik Roychoudhury. Information-theoretically secure and highly efficient search and row retrieval. *Proceedings of the VLDB Endowment*, 16(10):2391–2403, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603582.

Kato:2023:OOF

[3347] Fumiyuki Kato, Yang Cao, and Masatoshi Yoshikawa. Olive: Oblivious federated learning on trusted execution environment against the risk of sparsification. *Proceedings of the VLDB Endowment*, 16(10):2404–2417, June

2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603583.

Luo:2023:TEF

[3348] Chengyang Luo, Qing Liu, Yunjun Gao, Lu Chen, Ziheng Wei, and Congcong Ge. Task: an efficient framework for instant error-tolerant spatial keyword queries on road networks. *Proceedings of the VLDB Endowment*, 16(10):2418–2430, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603584.

Kassaie:2023:ACI

[3349] Besat Kassaie and Frank Wm. Tompa. Autonomously computable information extraction. *Proceedings of the VLDB Endowment*, 16(10):2431–2443, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603585.

Koutsoukos:2023:NIV

[3350] Dimitrios Koutsoukos, Raghav Bhartia, Michal Friedman, Ana Klimovic, and Gustavo Alonso. NVM: Is it not very meaningful for databases? *Proceedings of the VLDB Endowment*, 16(10):2444–2457, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603586.

Dong:2023:DJT

[3351] Yuyang Dong, Chuan Xiao, Takuma Nozawa, Masafumi Enomoto, and Masafumi Oyamada. DeepJoin: Joinable table discovery with pre-trained language models. *Proceedings of the VLDB Endowment*, 16(10):2458–2470, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603587.

Wu:2023:FPP

[3352] Yuncheng Wu, Naili Xing, Gang Chen, Tien Tuan Anh Dinh, Zhaojing Luo, Beng Chin Ooi, Xiaokui Xiao, and Meihui Zhang. Falcon: a privacy-preserving and interpretable vertical federated learning system. *Proceedings of the VLDB Endowment*, 16(10):2471–2484, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603588.

Gao:2023:ESE

[3353] Haotian Gao, Cong Yue, Tien Tuan Anh Dinh, Zhiyong Huang, and Beng Chin Ooi. Enabling secure and efficient data analytics pipeline evolution with trusted execution environment. *Proceedings of the VLDB Endowment*, 16(10):2485–2498, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603589.

Doraiswamy:2023:CGD

[3354] Harish Doraiswamy, Vikas Kalagi, Karthik Ramachandra, and Jayant R. Haritsa. A case for graphics-driven query processing. *Proceedings of the VLDB Endowment*, 16(10):2499–2511, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603590.

Tian:2023:EER

[3355] Wei Tian, Jieming Shi, Siqiang Luo, Hui Li, Xike Xie, and Yuanhang Zou. Effective and efficient route planning using historical trajectories on road networks. *Proceedings of the VLDB Endowment*, 16(10):2512–2524, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603591`.

Lampropoulos:2023:AIH

[3356] Konstantinos Lampropoulos, Fatemeh Zardbani, Nikos Mamoulis, and Panagiotis Karras. Adaptive indexing in high-dimensional metric spaces. *Proceedings of the VLDB Endowment*, 16 (10):2525–2537, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603592`.

Gao:2023:PCS

[3357] Sen Gao, Hongchao Qin, Rong-Hua Li, and Bingsheng He. Parallel colorful h-star core maintenance in dynamic graphs. *Proceedings of the VLDB Endowment*, 16(10):2538–2550, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603593`.

Li:2023:MFM

[3358] Jia Li, Wenyue Zhao, Nikos Ntarmos, Yang Cao, and Peter Buneman. MITra: a framework for multi-instance graph traversal. *Proceedings of the VLDB Endowment*, 16(10):2551–2564, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603594`.

Chen:2023:CEB

[3359] Jiazun Chen, Yikuan Xia, and Jun Gao. CommunityAF: an example-based community search method via autoregressive flow. *Proceedings of the VLDB Endowment*, 16(10):2565–2577, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603595`.

Lin:2023:ABA

[3360] Yiming Lin, Yeye He, and Surajit Chaudhuri. Auto-BI: Automatically build BI-models leveraging local join prediction and global schema graph. *Proceedings of the VLDB Endowment*, 16(10):2578–2590, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603596`.

Zhang:2023:TDC

[3361] Yuemin Zhang, Qingqing Ye, Rui Chen, Haibo Hu, and Qilong Han. Trajectory data collection with local differential privacy. *Proceedings of the VLDB Endowment*, 16(10):2591–2604, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603597`.

Gao:2023:LNM

[3362] Jian Gao, Xin Cao, Xin Yao, Gong Zhang, and Wei Wang. LMSFC: a novel multidimensional index based on learned monotonic space filling curves. *Proceedings of the VLDB Endowment*, 16(10):2605–2617, June 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3603581.3603598`.

Rong:2023:SDC

[3363] Kexin Rong, Mihai Budiu, Athinagoras Skiadopoulos, Lalith Suresh, and Amy Tai. Scaling a declarative cluster manager architecture with query optimization techniques. *Proceedings of the VLDB Endowment*, 16(10):2618–2631, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603599.

Singh:2023:CLT

[3364] Mukul Singh, José Cambronero Sánchez, Sumit Gulwani, Vu Le, Carina Negreanu, Mohammad Raza, and Gust Verbruggen. Cornet: Learning table formatting rules by example. *Proceedings of the VLDB Endowment*, 16 (10):2632–2644, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603600.

Zuo:2023:AAR

[3365] Chaoji Zuo and Dong Deng. ARK-Graph: All-range approximate K-nearest-neighbor graph. *Proceedings of the VLDB Endowment*, 16(10): 2645–2658, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603601.

Youngmann:2023:CDI

[3366] Brit Youngmann, Michael Cafarella, Babak Salimi, and Anna Zeng. Causal data integration. *Proceedings of the VLDB Endowment*, 16(10):2659–2665, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603602.

Martini:2023:MFI

[3367] Michael Martini, Daniel Schuster, and Wil M. P. van der Aalst. Mining frequent infix patterns from concurrency-aware process execution variants. *Proceedings of the VLDB Endowment*, 16 (10):2666–2678, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603603.

Pedreira:2023:CDM

[3368] Pedro Pedreira, Orri Erling, Konstantinos Karanasos, Scott Schneider, Wes McKinney, Satya R. Valluri, Mohamed Zait, and Jacques Nadeau. The composable data management system manifesto. *Proceedings of the VLDB Endowment*, 16(10):2679–2685, June 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3603581.3603604.

Schmitt:2023:TLS

[3369] Daniel Schmitt, Daniel Kocher, Nikolaus Augsten, Willi Mann, and Alexander Miller. A two-level signature scheme for stable set similarity joins. *Proceedings of the VLDB Endowment*, 16(11):2686–2698, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611480.

Rodriguez:2023:SRD

[3370] Olivier Rodriguez, Federico Ulliana, and Marie-Laure Mugnier. Scalable reasoning on document stores via instance-aware query rewriting. *Proceedings of the VLDB Endowment*, 16 (11):2699–2713, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611481.

Zhang:2023:EVS

[3371] Enhao Zhang, Maureen Daum, Dong He, Brandon Haynes, Ranjay Krishna, and Magdalena Balazinska. EQUI-VOCAL: Synthesizing queries for compositional video events from limited user interactions. *Proceedings of the*

VLDB Endowment, 16(11):2714–2727, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611482`.

Zhang:2023:LBG

[3372] Yuhao Zhang and Arun Kumar. Lotan: Bridging the gap between GNNs and scalable graph analytics engines. *Proceedings of the VLDB Endowment*, 16 (11):2728–2741, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611483`.

Kraft:2023:EAT

[3373] Peter Kraft, Qian Li, Xinjing Zhou, Peter Bailis, Michael Stonebraker, Matei Zaharia, and Xiangyao Yu. Epoxy: ACID transactions across diverse data stores. *Proceedings of the VLDB Endowment*, 16(11):2742–2754, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611484`.

Bother:2023:AVH

[3374] Maximilian Böther, Lawrence Benson, Ana Klimovic, and Tilmann Rabl. Analyzing vectorized hash tables across CPU architectures. *Proceedings of the VLDB Endowment*, 16(11):2755–2768, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611485`.

Durner:2023:ECO

[3375] Dominik Durner, Viktor Leis, and Thomas Neumann. Exploiting cloud object storage for high-performance analytics. *Proceedings of the VLDB Endowment*, 16(11):2769–2782, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611486`.

Karapiperis:2023:RBS

[3376] Dimitrios Karapiperis, Christos Tjortjis, and Vassilios S. Verykios. A randomized blocking structure for streaming record linkage. *Proceedings of the VLDB Endowment*, 16(11):2783–2791, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611487`.

Riveros:2023:RNR

[3377] Cristian Riveros, Nicolás Van Sint Jan, and Domagoj Vrgoc. REmatch: a novel regex engine for finding all matches. *Proceedings of the VLDB Endowment*, 16(11):2792–2804, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611488`.

Wang:2023:AAO

[3378] Junxiong Wang, Immanuel Trummer, Ahmet Kara, and Dan Olteanu. ADOPT: Adaptively optimizing attribute orders for worst-case optimal join algorithms via reinforcement learning. *Proceedings of the VLDB Endowment*, 16(11):2805–2817, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611489`.

Hu:2023:TSM

[3379] Zheng Hu, Weiguo Zheng, and Xiang Lian. Triangular stability maximization by influence spread over social networks. *Proceedings of the VLDB Endowment*, 16(11):2818–2831, July 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611479.3611490`.

Guan:2023:CSE

[3380] Haoquan Guan, Ziling Chen, and Shaoxu Song. CORE-Sketch: On exact computation of median absolute deviation with limited space. *Proceedings of the VLDB Endowment*, 16 (11):2832–2844, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611491.

Lulf:2023:FSC

[3381] Christian Lülf, Denis Mayr Lima Martins, Marcos Antonio Vaz Salles, Yongluan Zhou, and Fabian Gieseke. Fast search-by-classification for large-scale databases using index-aware decision trees and random forests. *Proceedings of the VLDB Endowment*, 16 (11):2845–2857, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611492.

Calautti:2023:SOC

[3382] Marco Calautti, Mostafa Milani, and Andreas Pieris. Semi-oblivious chase termination for linear existential rules: an experimental studya. *Proceedings of the VLDB Endowment*, 16 (11):2858–2870, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611493.

Lee:2023:AIC

[3383] Kukjin Lee, Anshuman Dutt, Vivek Narasayya, and Surajit Chaudhuri. Analyzing the impact of cardinality estimation on execution plans in Microsoft SQL server. *Proceedings of the VLDB Endowment*, 16(11):2871–2883, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611494.

Lee:2023:WLZ

[3384] Jongsung Lee, Donguk Kim, and Jae W. Lee. WALTZ: Leveraging zone append to tighten the tail latency of LSM tree on ZNS SSD. *Proceedings of the VLDB Endowment*, 16 (11):2884–2896, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611495.

Russo:2023:AAQ

[3385] Matthew Russo, Tatsunori Hashimoto, Daniel Kang, Yi Sun, and Matei Zaharia. Accelerating aggregation queries on unstructured streams of data. *Proceedings of the VLDB Endowment*, 16(11):2897–2910, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611496.

Bai:2023:QIS

[3386] Qiushi Bai, Sadeem Alsudais, and Chen Li. QueryBooster: Improving SQL performance using middleware services for human-centered query rewriting. *Proceedings of the VLDB Endowment*, 16(11):2911–2924, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611497.

Zhu:2023:CRA

[3387] Jiongli Zhu, Sainyam Galhotra, Nazanin Sabri, and Babak Salimi. Consistent range approximation for fair predictive modeling. *Proceedings of the VLDB Endowment*, 16(11):2925–2938, July 2023. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3611479.3611498.

Yin:2023:SMW

[3388] Haoteng Yin, Muhan Zhang, Jianguo Wang, and Pan Li. SUREL+: Moving from walks to sets for scalable subgraph-based graph representation learning. *Proceedings of the VLDB Endowment*, 16(11):2939–2948, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611499.

Wang:2023:ESN

[3389] Hanzhi Wang and Zhewei Wei. Estimating single-node PageRank in $\tilde{O}(\min d_t, \sqrt{m})$ time. *Proceedings of the VLDB Endowment*, 16(11):2949–2961, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611500.

Zhang:2023:SAQ

[3390] Yunjia Zhang, Yannis Chronis, Jignesh M. Patel, and Theodoros Rekatsinas. Simple adaptive query processing vs. learned query optimizers: Observations and analysis. *Proceedings of the VLDB Endowment*, 16(11):2962–2975, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611501.

Xu:2023:BTO

[3391] Helen Xu, Amanda Li, Brian Wheatman, Manoj Marneni, and Prashant Pandey. BP-Tree: Overcoming the point-range operation tradeoff for in-memory B-trees. *Proceedings of the VLDB Endowment*, 16(11):2976–2989, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611502.

Lv:2023:HXT

[3392] Ge Lv, Chen Jason Zhang, and Lei Chen. HENCE-X: Toward heterogeneity-agnostic multi-level explainability for deep graph networks. *Proceedings of the VLDB Endowment*, 16(11):2990–3003, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611503.

Yuan:2023:ARE

[3393] Haitao Yuan, Sai Wang, Zhifeng Bao, and Shangguang Wang. Automatic road extraction with multi-source data revisited: Completeness, smoothness and discrimination. *Proceedings of the VLDB Endowment*, 16(11):3004–3017, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611504.

Fent:2023:ABQ

[3394] Philipp Fent, Guido Moerkotte, and Thomas Neumann. Asymptotically better query optimization using indexed algebra. *Proceedings of the VLDB Endowment*, 16(11):3018–3030, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611505.

Skavantzos:2023:NPG

[3395] Philipp Skavantzos and Sebastian Link. Normalizing property graphs. *Proceedings of the VLDB Endowment*, 16(11):3031–3043, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611506.

Liu:2023:DDC

[3396] Chunwei Liu, Anna Pavlenko, Matteo Interlandi, and Brandon Haynes. A deep dive into common open formats for analytical DBMSs. *Proceedings of the VLDB Endowment*, 16 (11):3044–3056, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611507.

Huang:2023:SDP

[3397] Zezhou Huang, Jiaxiang Liu, Daniel Gbenga Alabi, Raul Castro Fernandez, and Eugene Wu. Saibot: a differentially private data search platform. *Proceedings of the VLDB Endowment*, 16 (11):3057–3070, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611508.

Huang:2023:JGT

[3398] Zezhou Huang, Rathijit Sen, Jiaxiang Liu, and Eugene Wu. JoinBoost: Grow trees over normalized data using only SQL. *Proceedings of the VLDB Endowment*, 16(11):3071–3084, July 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611479.3611509.

Li:2023:RRR

[3399] Qian Li, Peter Kraft, Michael Cafarella, Çagatay Demiralp, Goetz Graefe, Christos Kozyrakis, Michael Stonebraker, Lalith Suresh, Xiangyao Yu, and Matei Zaharia. R^3: Record-replay-retroaction for database-backed applications. *Proceedings of the VLDB Endowment*, 16(11):3085–3097, July 2023. CODEN ???? ISSN 2150-8097.

Sarkhel:2023:STL

[3400] Ritesh Sarkhel, Binxuan Huang, Colin Lockard, and Prashant Shiralkar. Self-training for label-efficient information extraction from semi-structured Webpages. *Proceedings of the VLDB Endowment*, 16(11):3098–3110, July 2023. CODEN ???? ISSN 2150-8097.

Jin:2023:ENL

[3401] Jiabao Jin, Peng Cheng, Lei Chen, Xuemin Lin, and Wenjie Zhang. Efficient non-learning similar subtrajectory search. *Proceedings of the VLDB Endowment*, 16(11):3111–3123, July 2023. CODEN ???? ISSN 2150-8097.

Cao:2023:FRA

[3402] Xinle Cao, Jian Liu, Yongsheng Shen, Xiaohua Ye, and Kui Ren. Frequency-revealing attacks against frequency-hiding order-preserving encryption. *Proceedings of the VLDB Endowment*, 16(11):3124–3136, July 2023. CODEN ???? ISSN 2150-8097.

Zhang:2023:EFT

[3403] Tianyu Zhang, Kaige Liu, Jack Kosaian, Juncheng Yang, and Rashmi Vinayak. Efficient fault tolerance for recommendation model training via erasure coding. *Proceedings of the VLDB Endowment*, 16(11):3137–3150, July 2023. CODEN ???? ISSN 2150-8097.

Dong:2023:SWQ

[3404] Rui Dong, Jie Liu, Yuxuan Zhu, Cong Yan, Barzan Mozafari, and Xinyu Wang. SlabCity: Whole-query optimization using program synthesis. *Proceedings of the VLDB Endowment*, 16 (11):3151–3164, July 2023. CODEN ???? ISSN 2150-8097.

Howie:2023:SSC

[3405] Joseph Howie, Venkatesh Srinivasan, and Alex Thomo. Scaling up structural clustering to large probabilistic graphs using Lyapunov central limit theorem. *Proceedings of the VLDB Endowment*, 16(11):3165–3177, July 2023. CODEN ???? ISSN 2150-8097.

Rosenblatt:2023:EPR

[3406] Lucas Rosenblatt, Bernease Herman, Anastasia Holovenko, Wonkwon Lee, Joshua Loftus, Elizabeth McKinnie, Taras Rumezhak, Andrii Stadnik, Bill Howe, and Julia Stoyanovich. Epistemic parity: Reproducibility as an evaluation metric for differential privacy. *Proceedings of the VLDB Endowment*, 16(11):3178–3191, July 2023. CODEN ???? ISSN 2150-8097.

Dadvar:2023:PPO

[3407] Vargha Dadvar, Lukasz Golab, and Divesh Srivastava. POEM: Pattern-oriented explanations of convolutional neural networks. *Proceedings of the VLDB Endowment*, 16(11):3192–3200, July 2023. CODEN ???? ISSN 2150-8097.

Liu:2023:GEC

[3408] Dandan Liu and Zhaonian Zou. gCore: Exploring cross-layer cohesiveness in multi-layer graphs. *Proceedings of the VLDB Endowment*, 16(11):3201–3213, July 2023. CODEN ???? ISSN 2150-8097.

Tong:2023:SLD

[3409] Yulai Tong, Jiazhen Liu, Hua Wang, Ke Zhou, Rongfeng He, Qin Zhang, and Cheng Wang. Sieve: a learned data-skipping index for data analytics. *Proceedings of the VLDB Endowment*, 16(11):3214–3226, July 2023. CODEN ???? ISSN 2150-8097.

Tangwongsan:2023:OSW

[3410] Kanat Tangwongsan, Martin Hirzel, and Scott Schneider. Out-of-order sliding-window aggregation with efficient bulk evictions and insertions. *Proceedings of the VLDB Endowment*, 16(11):3227–3239, July 2023. CODEN ???? ISSN 2150-8097.

Wu:2023:BES

[3411] Siyuan Wu, Leong Hou U., and Panagiotis Karras. k-best egalitarian stable marriages for task assignment. *Proceedings of the VLDB Endowment*, 16(11):3240–3252, July 2023. CODEN ???? ISSN 2150-8097.

Cormode:2023:FCE

[3412] Graham Cormode and Igor L. Markov. Federated calibration and evaluation of binary classifiers. *Proceedings of the VLDB Endowment*, 16(11):3253–3265, July 2023. CODEN ???? ISSN 2150-8097.

Park:2023:FDF

[3413] Jonghyeok Park, Soyee Choi, Gihwan Oh, Soojun Im, Moon-Wook Oh, and Sang-Won Lee. FlashAlloc: Dedicating flash blocks by objects. *Proceedings of the VLDB Endowment*, 16(11):3266–3278, July 2023. CODEN ???? ISSN 2150-8097.

Shahbazi:2023:TFL

[3414] Nima Shahbazi, Nikola Danevski, Fatemeh Nargesian, Abolfazl Asudeh, and Divesh Srivastava. Through the fairness lens: Experimental analysis and evaluation of entity matching. *Proceedings of the VLDB Endowment*, 16(11):

3279–3292, July 2023. CODEN ???? ISSN 2150-8097.

Kraska:2023:CBB

[3415] Tim Kraska, Tianyu Li, Samuel Madden, Markos Markakis, Amadou Ngom, Ziniu Wu, and Geoffrey X. Yu. Check out the big brain on BRAD: Simplifying cloud data processing with learned automated data meshes. *Proceedings of the VLDB Endowment*, 16(11):3293–3301, July 2023. CODEN ???? ISSN 2150-8097.

Fernandez:2023:HLL

[3416] Raul Castro Fernandez, Aaron J. Elmore, Michael J. Franklin, Sanjay Krishnan, and Chenhao Tan. How large language models will disrupt data management. *Proceedings of the VLDB Endowment*, 16(11):3302–3309, July 2023. CODEN ???? ISSN 2150-8097.

Woltmann:2023:FML

[3417] Lucas Woltmann, Jerome Thiessat, Claudio Hartmann, Dirk Habich, and Wolfgang Lehner. FASTgres: Making learned query optimizer hinting effective. *Proceedings of the VLDB Endowment*, 16(11):3310–3322, July 2023. CODEN ???? ISSN 2150-8097.

Vohringer:2023:WAT

[3418] Demian Vöhringer and Viktor Leis. Write-aware timestamp tracking: Effective and efficient page replacement for modern hardware. *Proceedings of the VLDB Endowment*, 16(11):3323–3334, July 2023. CODEN ???? ISSN 2150-8097.

Butrovich:2023:TDP

[3419] Matthew Butrovich, Karthik Ramanathan, John Rollinson, Wan Shen Lim, William Zhang, Justine Sherry, and Andrew Pavlo. Tigger: a database proxy that bounces with user-bypass. *Proceedings of the VLDB Endowment*, 16(11):3335–3348, July 2023. CODEN ???? ISSN 2150-8097.

Xia:2023:EDV

[3420] Haocheng Xia, Jinfei Liu, Jian Lou, Zhan Qin, Kui Ren, Yang Cao, and Li Xiong. Equitable data valuation meets the right to be forgotten in model markets. *Proceedings of the VLDB Endowment*, 16(11):3349–3362, July 2023. CODEN ???? ISSN 2150-8097.

Khelifati:2023:TBB

[3421] Abdelouahab Khelifati, Mourad Khayati, Anton Dignös, Djellel Difallah, and Philippe Cudré-Mauroux. TSM-Bench: Benchmarking time series database systems for monitoring applications. *Proceedings of the VLDB Endowment*, 16 (11):3363–3376, July 2023. CODEN ???? ISSN 2150-8097.

Eltabakh:2023:CMD

[3422] Mohamed Y. Eltabakh, Mayuresh Kunjir, Ahmed K. Elmagarmid, and Mohammad Shahmeer Ahmad. Cross modal data discovery over structured and unstructured data lakes. *Proceedings of the VLDB Endowment*, 16(11): 3377–3390, July 2023. CODEN ???? ISSN 2150-8097.

Li:2023:ATS

[3423] Peng Li, Yeye He, Cong Yan, Yue Wang, and Surajit Chaudhuri. Auto-Tables: Synthesizing multi-step transformations to relationalize tables without using examples. *Proceedings of the VLDB Endowment*, 16(11):3391–3403, July 2023. CODEN ???? ISSN 2150-8097.

Buss:2023:EEA

[3424] Christopher Buss, Jasmin Mousavi, Mikhail Tokarev, Arash Termehchy, David Maier, and Stefan Lee. Effective entity augmentation by querying external data sources. *Proceedings of the VLDB Endowment*, 16(11):3404–3417, July 2023. CODEN ???? ISSN 2150-8097.

Sylligardos:2023:CWE

[3425] Emmanouil Sylligardos, Paul Boniol, John Paparrizos, Panos Trahanias, and Themis Palpanas. Choose wisely: an extensive evaluation of model selection for anomaly detection in time series. *Proceedings of the VLDB Endowment*, 16(11):3418–3432, July 2023. CODEN ???? ISSN 2150-8097.

Aguerrebere:2023:SSB

[3426] Cecilia Aguerrebere, Ishwar Singh Bhati, Mark Hildebrand, Mariano Tepper, and Theodore Willke. Similarity search in the blink of an eye with compressed indices. *Proceedings of the VLDB Endowment*, 16(11):3433–3446, July 2023. CODEN ???? ISSN 2150-8097.

Lv:2023:DAG

[3427] Ge Lv and Lei Chen. On data-aware global explainability of graph neural networks. *Proceedings of the VLDB Endowment*, 16(11):3447–3460, July 2023. CODEN ???? ISSN 2150-8097.

Jungmair:2023:DSO

[3428] Michael Jungmair and Jana Giceva. Declarative sub-operators for universal data processing. *Proceedings of the VLDB Endowment*, 16(11):3461–3474, July 2023. CODEN ???? ISSN 2150-8097.

Tatemura:2023:PPP

[3429] Junichi Tatemura, Tao Zou, Jagan Sankaranarayanan, Yanlai Huang, Jim Chen, Yupu Zhang, Kevin Lai, Hao Zhang, Gokul Nath Babu Manoharan, Goetz Graefe, Divyakant Agrawal, Brad Adelberg, Shilpa Kolhar, and Indrajit Roy. Progressive partitioning for parallelized query execution in Google's Napa. *Proceedings of the VLDB Endowment*, 16(12):3475–3487, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611541`.

Depoutovitch:2023:TMB

[3430] Alex Depoutovitch, Chong Chen, Per-Ake Larson, Jack Ng, Shu Lin, Guanzhu Xiong, Paul Lee, Emad Boctor, Samiao Ren, Lengdong Wu, Yuchen Zhang, and Calvin Sun. Taurus MM: Bringing multi-master to the cloud. *Proceedings of the VLDB Endowment*, 16(12):3488–3500, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611542`.

Mao:2023:SCN

[3431] Yancan Mao, Zhanghao Chen, Yifan Zhang, Meng Wang, Yong Fang, Guanghui Zhang, Rui Shi, and Richard T. B. Ma. StreamOps: Cloud-native runtime management for streaming services in ByteDance. *Proceedings of the VLDB Endowment*, 16(12):3501–3514, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611543`.

Anneser:2023:ALQ

[3432] Christoph Anneser, Nesime Tatbul, David Cohen, Zhenggang Xu, Prithviraj Pandian, Nikolay Laptev, and Ryan Marcus. AutoSteer: Learned query optimization for any SQL database. *Proceedings of the VLDB Endowment*, 16 (12):3515–3527, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611544.

Chen:2023:KRT

[3433] Jianjun Chen, Rui Shi, Heng Chen, Li Zhang, Ruidong Li, Wei Ding, Liya Fan, Hao Wang, Mu Xiong, Yuxiang Chen, Benchao Dong, Kuankuan Guo, Yuanjin Lin, Xiao Liu, Haiyang Shi, Peipei Wang, Zikang Wang, Yemeng Yang, Junda Zhao, Dongyan Zhou, Zhikai Zuo, and Yuming Liang. Krypton: Real-time serving and analytical SQL engine at ByteDance. *Proceedings of the VLDB Endowment*, 16 (12):3528–3542, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611545.

Zou:2023:EVE

[3434] Yuanhang Zou, Zhihao Ding, Jieming Shi, Shuting Guo, Chunchen Su, and Yafei Zhang. EmbedX: a versatile, efficient and scalable platform to embed both graphs and high-dimensional sparse data. *Proceedings of the VLDB Endowment*, 16(12):3543–3556, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611546.

Saxena:2023:SAG

[3435] Mohit Saxena, Benjamin Sowell, Daiyan Alamgir, Nitin Bahadur, Bijay Bisht, Santosh Chandrachood, Chitti Keswani, G. Krishnamoorthy, Austin Lee, Bohou Li, Zach Mitchell, Vaibhav Porwal, Maheedhar Reddy Chappidi, Brian Ross, Noritaka Sekiyama, Omer Zaki, Linchi Zhang, and Mehul A. Shah. The story of AWS Glue. *Proceedings of the VLDB Endowment*, 16 (12):3557–3569, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611547.

Li:2023:TGE

[3436] Yang Li, Huaijun Jiang, Yu Shen, Yide Fang, Xiaofeng Yang, Danqing Huang, Xinyi Zhang, Wentao Zhang, Ce Zhang, Peng Chen, and Bin Cui. Towards general and efficient online tuning for Spark. *Proceedings of the VLDB Endowment*, 16(12):3570–3583, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611548.

Zhang:2023:CBP

[3437] Jiashu Zhang, Wen Jiang, Bo Tang, Haoxiang Ma, Lixun Cao, Zhongbin Jiang, Yuanyuan Nie, Fan Wang, Lei Zhang, and Yuming Liang. CDSBen: Benchmarking the performance of storage services in cloud-native database system at ByteDance. *Proceedings of the VLDB Endowment*, 16(12): 3584–3596, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611549.

Zhou:2023:FBR

[3438] Xuanhe Zhou, Cheng Chen, Kunyi Li, Bingsheng He, Mian Lu, Qiaosheng Liu, Wei Huang, Guoliang Li, Zhao

Zheng, and Yuqiang Chen. FEBench: a benchmark for real-time relational data feature extraction. *Proceedings of the VLDB Endowment*, 16(12):3597–3609, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611550.

Xiao:2023:MDF

[3439] Fei Xiao, Yuncheng Wu, Meihui Zhang, Gang Chen, and Beng Chin Ooi. MINT: Detecting fraudulent behaviors from time-series relational data. *Proceedings of the VLDB Endowment*, 16 (12):3610–3623, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611551.

Ahmad:2023:MPS

[3440] Shafi Ahmad, Dillidorai Arumugam, Srdan Bozovic, Elnata Degefa, Sailesh Duvvuri, Steven Gott, Nitish Gupta, Joachim Hammer, Nivedita Kaluskar, Raghav Kaushik, Rakesh Khanduja, Prasad Mujumdar, Gaurav Malhotra, Pankaj Naik, Nikolas Ogg, Krishna Kumar Parthasarthy, Raghu Ramakrishnan, Vlad Rodriguez, Rahul Sharma, Jakub Szymaszek, and Andreas Wolter. Microsoft Purview: a system for central governance of data. *Proceedings of the VLDB Endowment*, 16(12):3624–3635, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611552.

Lin:2023:AAI

[3441] Liang Lin, Yuhan Li, Bin Wu, Huijun Mai, Renjie Lou, Jian Tan, and Feifei Li. Anser: Adaptive information sharing framework of AnalyticDB. *Proceedings of the VLDB Endowment*, 16(12):3636–3648, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611553.

Brucke:2023:TAI

[3442] Christoph Brücke, Philipp Härtling, Rodrigo D Escobar Palacios, Hamesh Patel, and Tilmann Rabl. TPCx-AI — an industry standard benchmark for artificial intelligence and machine learning systems. *Proceedings of the VLDB Endowment*, 16(12):3649–3661, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611554.

Psallidas:2023:OEE

[3443] Fotis Psallidas, Ashvin Agrawal, Chandru Sugunan, Khaled Ibrahim, Konstantinos Karanasos, Jesús Camacho-Rodríguez, Avrilia Floratou, Carlo Curino, and Raghu Ramakrishnan. OneProvenance: Efficient extraction of dynamic coarse-grained provenance from database query event logs. *Proceedings of the VLDB Endowment*, 16 (12):3662–3675, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611555.

Srinivasan:2023:TEB

[3444] V. Srinivasan, Andrew Gooding, Sunil Sayyaparaju, Thomas Lopatic, Kevin Porter, Ashish Shinde, and B. Narendran. Techniques and efficiencies from building a real-time DBMS. *Proceedings of the VLDB Endowment*, 16(12): 3676–3688, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611556.

Wang:2023:RTW

[3445] Jiaqi Wang, Tianyi Li, Anni Wang, Xiaoze Liu, Lu Chen, Jie Chen, Jianye Liu, Junyang Wu, Feifei Li, and Yunjun Gao. Real-time workload pattern analysis for large-scale cloud databases. *Proceedings of the VLDB Endowment*, 16(12):3689–3701, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611557`.

Li:2023:BDA

[3446] Jiang Li, Qi Xie, Yan Ma, Jian Ma, Kunshang Ji, Yizhong Zhang, Chaojun Zhang, Yixiu Chen, Gangsheng Wu, Jie Zhang, Kaidi Yang, Xinyi He, Qiuyang Shen, Yanting Tao, Haiwei Zhao, Penghui Jiao, Chengfei Zhu, David Qian, and Cheng Xu. Big data analytic toolkit: a general-purpose, modular, and heterogeneous acceleration toolkit for data analytical engines. *Proceedings of the VLDB Endowment*, 16(12):3702–3714, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611558`.

Shen:2023:LTC

[3447] Chunhui Shen, Qianyu Ouyang, Feibo Li, Zhipeng Liu, Longcheng Zhu, Yujie Zou, Qing Su, Tianhuan Yu, Yi Yi, Jianhong Hu, Cen Zheng, Bo Wen, Hanbang Zheng, Lunfan Xu, Sicheng Pan, Bin Wu, Xiao He, Ye Li, Jian Tan, Sheng Wang, Dan Pei, Wei Zhang, and Feifei Li. Lindorm TSDB: a cloud-native time-series database for large-scale monitoring systems. *Proceedings of the VLDB Endowment*, 16(12):3715–3727, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611559`.

Yang:2023:OPH

[3448] Zhifeng Yang, Quanqing Xu, Shanyan Gao, Chuanhui Yang, Guoping Wang, Yuzhong Zhao, Fanyu Kong, Hao Liu, Wanhong Wang, and Jinliang Xiao. OceanBase Paetica: a hybrid shared-nothing/shared-everything database for supporting single machine and distributed cluster. *Proceedings of the VLDB Endowment*, 16 (12):3728–3740, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611560`.

Yao:2023:SEU

[3449] Yuanyuan Yao, Dimeng Li, Hailiang Jie, Hailiang Jie, Tianyi Li, Jie Chen, Jiaqi Wang, Feifei Li, and Yunjun Gao. SimpleTS: an efficient and universal model selection framework for time series forecasting. *Proceedings of the VLDB Endowment*, 16(12):3741–3753, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611561`.

Yang:2023:PSC

[3450] Xinjun Yang, Yingqiang Zhang, Hao Chen, Chuan Sun, Feifei Li, and Wenchao Zhou. PolarDB-SCC: a cloud-native database ensuring low latency for strongly consistent reads. *Proceedings of the VLDB Endowment*, 16 (12):3754–3767, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611562`.

Yamada:2023:SUT

[3451] Hiroyuki Yamada, Toshihiro Suzuki, Yuji Ito, and Jun Nemoto. ScalarDB: Universal transaction manager for polystores. *Proceedings of the VLDB Endowment*, 16(12):3768–3780, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611563.

Nie:2023:APS

[3452] Xiaonan Nie, Yi Liu, Fangcheng Fu, Jinbao Xue, Dian Jiao, Xupeng Miao, Yangyu Tao, and Bin Cui. Angel-PTM: a scalable and economical large-scale pre-training system in Tencent. *Proceedings of the VLDB Endowment*, 16(12):3781–3794, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611564.

Li:2023:EEE

[3453] Ji You Li, Jiachi Zhang, Wenchao Zhou, Yuhang Liu, Shuai Zhang, Zhuoming Xue, Ding Xu, Hua Fan, Fangyuan Zhou, and Feifei Li. Eigen: End-to-end resource optimization for large-scale databases on the cloud. *Proceedings of the VLDB Endowment*, 16(12):3795–3807, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611565.

Pan:2023:MUA

[3454] Zhicheng Pan, Yihang Wang, Yingying Zhang, Sean Bin Yang, Yunyao Cheng, Peng Chen, Chenjuan Guo, Qingsong Wen, Xiduo Tian, Yunliang Dou, Zhiqiang Zhou, Chengcheng Yang, Aoying Zhou, and Bin Yang. MagicScaler: Uncertainty-aware, predictive autoscaling. *Proceedings of the VLDB Endowment*, 16(12):3808–3821, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611566.

Povzner:2023:KCN

[3455] Anna Povzner, Prince Mahajan, Jason Gustafson, Jun Rao, Ismael Juma, Feng Min, Shriram Sridharan, Nikhil Bhatia, Gopi Attaluri, Adithya Chandra, Stanislav Kozlovski, Rajini Sivaram, Lucas Bradstreet, Bob Barrett, Dhruvil Shah, David Jacot, David Arthur, Ron Dagostino, Colin McCabe, Manikumar Reddy Obili, Kowshik Prakasam, Jose Garcia Sancio, Vikas Singh, Alok Nikhil, and Kamal Gupta. Kora: a cloud-native event streaming platform for Kafka. *Proceedings of the VLDB Endowment*, 16(12):3822–3834, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611567.

Pasupuleti:2023:ASE

[3456] Krishna Kantikiran Pasupuleti, Jiakun Li, Hong Su, and Mohamed Ziauddin. Automatic SQL error mitigation in Oracle. *Proceedings of the VLDB Endowment*, 16(12):3835–3847, August 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3611540.3611568.

Zhao:2023:PFE

[3457] Yanli Zhao, Andrew Gu, Rohan Varma, Liang Luo, Chien-Chin Huang, Min Xu, Less Wright, Hamid Shojanazeri, Myle Ott, Sam Shleifer, Alban Desmaison, Can Balioglu, Pritam Damania, Bernard Nguyen, Geeta

Chauhan, Yuchen Hao, Ajit Mathews, and Shen Li. PyTorch FSDP: Experiences on scaling fully sharded data parallel. *Proceedings of the VLDB Endowment*, 16(12):3848–3860, August 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3611540.3611569`.

Keogh:2023:TSD

[3458] Eamonn Keogh. Time series data mining: a unifying view. *Proceedings of the VLDB Endowment*, 16(12):3861–3863, August 2023. CODEN ???? ISSN 2150-8097.

Yow:2023:MLS

[3459] Kai Siong Yow, Ningyi Liao, Siqiang Luo, and Reynold Cheng. Machine learning for subgraph extraction: Methods, applications and challenges. *Proceedings of the VLDB Endowment*, 16(12):3864–3867, August 2023. CODEN ???? ISSN 2150-8097.

Ahmad:2023:PIR

[3460] Ishtiyaque Ahmad, Divyakant Agrawal, Amr El Abbadi, and Trinabh Gupta. Private information retrieval in large scale public data repositories. *Proceedings of the VLDB Endowment*, 16(12):3868–3871, August 2023. CODEN ???? ISSN 2150-8097.

Pei:2023:DAM

[3461] Jian Pei, Raul Castro Fernandez, and Xiaohui Yu. Data and AI model markets: Opportunities for data and model sharing, discovery, and integration. *Proceedings of the VLDB Endowment*, 16(12):3872–3873, August 2023. CODEN ???? ISSN 2150-8097.

Foufoulas:2023:EEU

[3462] Yannis Foufoulas and Alkis Simitsis. Efficient execution of user-defined functions in SQL queries. *Proceedings of the VLDB Endowment*, 16(12):3874–3877, August 2023. CODEN ???? ISSN 2150-8097.

Katsogiannis-Meimarakis:2023:NLI

[3463] George Katsogiannis-Meimarakis, Mike Xydas, and Georgia Koutrika. Natural language interfaces for databases with deep learning. *Proceedings of the VLDB Endowment*, 16(12):3878–3881, August 2023. CODEN ???? ISSN 2150-8097.

Yan:2023:JOS

[3464] Zhengtong Yan, Valter Uotila, and Jiaheng Lu. Join order selection with deep reinforcement learning: Fundamentals, techniques, and challenges. *Proceedings of the VLDB Endowment*, 16(12):3882–3885, August 2023. CODEN ???? ISSN 2150-8097.

Manolescu:2023:FPG

[3465] Ioana Manolescu and Madhulika Mohanty. Full-power graph querying: State of the art and challenges. *Proceedings of the VLDB Endowment*, 16 (12):3886–3889, August 2023. CODEN ???? ISSN 2150-8097.

Gatterbauer:2023:TVR

[3466] Wolfgang Gatterbauer. A tutorial on visual representations of relational queries. *Proceedings of the VLDB Endowment*, 16(12):3890–3893, August 2023. CODEN ???? ISSN 2150-8097.

Lerner:2023:DMN

[3467] Alberto Lerner, Carsten Binnig, Philippe Cudré-Mauroux, Rana Hussein, Matthias Jasny, Theo Jepsen, Dan R. K. Ports, Lasse Thostrup, and Tobias Ziegler. Databases on modern networks: a decade of research that now comes into practice. *Proceedings of the VLDB Endowment*, 16(12):3894–3897, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:BCD

[3468] Zuozhi Wang and Chen Li. Building a collaborative data analytics system: Opportunities and challenges. *Proceedings of the VLDB Endowment*, 16(12): 3898–3901, August 2023. CODEN ???? ISSN 2150-8097.

He:2023:PDO

[3469] Wenjia He, Ibrahim Sabek, Yuze Lou, and Michael Cafarella. PAINE Demo: Optimizing video selection queries with commonsense knowledge. *Proceedings of the VLDB Endowment*, 16(12):3902–3905, August 2023. CODEN ???? ISSN 2150-8097.

Xiao:2023:DDL

[3470] Ziyang Xiao, Dongxiang Zhang, Zepeng Li, Sai Wu, Kian-Lee Tan, and Gang Chen. DoveDB: a declarative and low-latency video database. *Proceedings of the VLDB Endowment*, 16(12): 3906–3909, August 2023. CODEN ???? ISSN 2150-8097.

Lew:2023:DDV

[3471] Dong June Lew, Kihyun Yoo, and Kwang Woo Nam. DeepVQL: Deep video queries on PostgreSQL. *Proceedings of the VLDB Endowment*, 16(12): 3910–3913, August 2023. CODEN ???? ISSN 2150-8097.

Tang:2023:DDD

[3472] Xiu Tang, Sai Wu, Dongxiang Zhang, Ziyue Wang, Gongsheng Yuan, and Gang Chen. A demonstration of DLBD: Database logic bug detection system. *Proceedings of the VLDB Endowment*, 16(12):3914–3917, August 2023. CODEN ???? ISSN 2150-8097.

Ni:2023:PBB

[3473] Wangze Ni, Pengze Chen, and Lei Chen. PSFQ: a blockchain-based privacy-preserving and verifiable student feedback questionnaire platform. *Proceedings of the VLDB Endowment*, 16(12):3918–3921, August 2023. CODEN ???? ISSN 2150-8097.

Anneser:2023:QII

[3474] Christoph Anneser, Mario Petruccelli, Nesime Tatbul, David Cohen, Zhenggang Xu, Prithviraj Pandian, Nikolay Laptev, Ryan Marcus, and Alfons Kemper. QO-Insight: Inspecting steered query optimizers. *Proceedings of the VLDB Endowment*, 16(12):3922–3925, August 2023. CODEN ???? ISSN 2150-8097.

Shen:2023:LGQ

[3475] Zhihong Shen, Chuan Hu, and Zihao Zhao. Lynx: a graph query framework for multiple heterogeneous data sources. *Proceedings of the VLDB Endowment*, 16(12):3926–3929, August 2023. CODEN ???? ISSN 2150-8097.

Lepping:2023:SDM

[3476] Aljoscha Lepping, Hoang Mi Pham, Laura Mons, Balint Rueb, Philipp M. Grulich, Ankit Chaudhary, Steffen Zeuch, and Volker Markl. Showcasing data management challenges for future

IoT applications with NebulaStream. *Proceedings of the VLDB Endowment*, 16(12):3930–3933, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:CLC

[3477] Zilong Wang, Qixiong Zeng, Ning Wang, Haowen Lu, and Yue Zhang. CEDA: Learned cardinality estimation with domain adaptation. *Proceedings of the VLDB Endowment*, 16(12):3934–3937, August 2023. CODEN ???? ISSN 2150-8097.

Zalipynis:2023:FAN

[3478] Ramon Antonio Rodriges Zalipynis. FastMosaic in action: a new mosaic operator for array DBMSs. *Proceedings of the VLDB Endowment*, 16(12):3938–3941, August 2023. CODEN ???? ISSN 2150-8097.

Ma:2023:SNM

[3479] Zhuo Ma, Yilong Yang, Bin Xiao, Yang Liu, Xinjing Liu, Zhuoran Ma, and Tong Yang. Sniffer: a novel model type detection system against machine-learning-as-a-service platforms. *Proceedings of the VLDB Endowment*, 16 (12):3942–3945, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:KKG

[3480] Xiang Wang, Xin Wang, Zhaozhuo Li, and Dong Han. KGNav: a knowledge graph navigational visual query system. *Proceedings of the VLDB Endowment*, 16(12):3946–3949, August 2023. CODEN ???? ISSN 2150-8097.

Mun:2023:FDT

[3481] Ju Hyoung Mun, Konstantinos Karatsenidis, Tarikul Islam Papon, Shahin Roozkhosh, Denis Hoornaert, Ulrich Drepper, Ahmed Sanaullah, Renato Mancuso, and Manos Athanassoulis. On-the-fly data transformation in action. *Proceedings of the VLDB Endowment*, 16(12):3950–3953, August 2023. CODEN ???? ISSN 2150-8097.

Choi:2023:DWS

[3482] Dalsu Choi, Hyunsik Yoon, Hyubjin Lee, and Yon Dohn Chung. Demonstrating waffle: a self-driving grid index. *Proceedings of the VLDB Endowment*, 16(12):3954–3957, August 2023. CODEN ???? ISSN 2150-8097.

Bylois:2023:CED

[3483] Niels Bylois, Frank Neven, and Stijn Vansummeren. CM-Explorer: Dissecting data ingestion problems. *Proceedings of the VLDB Endowment*, 16(12): 3958–3961, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:EDP

[3484] Tingyu Wang, Yuchao Tao, Amir Gilad, Ashwin Machanavajjhala, and Sudeepa Roy. Explaining differentially private query results with DPXPlain. *Proceedings of the VLDB Endowment*, 16(12):3962–3965, August 2023. CODEN ???? ISSN 2150-8097.

Xiao:2023:GAC

[3485] Fei Xiao, Jiong Xie, Zhida Chen, Feifei Li, Zhen Chen, Jianwei Liu, and Yinpei Liu. Ganos Aero: a cloud-native system for big raster data management and processing. *Proceedings of the VLDB Endowment*, 16(12):3966–3969, August 2023. CODEN ???? ISSN 2150-8097.

Ghorbani:2023:DOF

[3486] Mahdi Ghorbani and Amir Shaikhha. Demonstration of OpenDBML, a framework for democratizing in-database machine learning. *Proceedings of the VLDB Endowment*, 16(12): 3970–3973, August 2023. CODEN ???? ISSN 2150-8097.

Abdallah:2023:DSM

[3487] Hussein Abdallah, Waleed Afandi, and Essam Mansour. Demonstration of SPARQL ML : an interfacing language for supporting graph machine learning for RDF graphs. *Proceedings of the VLDB Endowment*, 16(12):3974–3977, August 2023. CODEN ???? ISSN 2150-8097.

Zhang:2023:EVD

[3488] Enhao Zhang, Maureen Daum, Dong He, Manasi Ganti, Brandon Haynes, Ranjay Krishna, and Magdalena Balazinska. EQUI-VOCAL demonstration: Synthesizing video queries from user interactions. *Proceedings of the VLDB Endowment*, 16(12):3978–3981, August 2023. CODEN ???? ISSN 2150-8097.

Qiu:2023:TMT

[3489] Yuanhui Qiu, Chenguang Fang, Shaoxu Song, Xiangdong Huang, Chen Wang, and Jianmin Wang. TsQuality: Measuring time series data quality in Apache IoTDB. *Proceedings of the VLDB Endowment*, 16(12):3982–3985, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:AQC

[3490] Congying Wang, Nithin Sastry Tellapuri, Sphoorthi Keshannagari, Dylan Zinsley, Zhuoyue Zhao, and Dong Xie. Approximate queries over concurrent updates. *Proceedings of the VLDB Endowment*, 16(12):3986–3989, August 2023. CODEN ???? ISSN 2150-8097.

Fritsch:2023:SHV

[3491] Kristin Fritsch and Stefanie Scherzinger. Solving hard variants of database schema matching on quantum computers. *Proceedings of the VLDB Endowment*, 16(12):3990–3993, August 2023. CODEN ???? ISSN 2150-8097.

Bonifati:2023:ICM

[3492] Angela Bonifati, Francesco Del Buono, Francesco Guerra, Miki Lombardi, and Donato Tiano. Interpretable clustering of multivariate time series with Time2Feat. *Proceedings of the VLDB Endowment*, 16(12):3994–3997, August 2023. CODEN ???? ISSN 2150-8097.

Zhang:2023:DQE

[3493] Chaozu Zhang, Qiaomu Shen, and Bo Tang. DHive: Query execution performance analysis via dataflow in Apache Hive. *Proceedings of the VLDB Endowment*, 16(12):3998–4001, August 2023. CODEN ???? ISSN 2150-8097.

Grafberger:2023:MWI

[3494] Stefan Grafberger, Shubha Guha, Paul Groth, and Sebastian Schelter. mlwhatif: What if you could stop re-implementing your machine learning pipeline analyses over and over? *Proceedings of the VLDB Endowment*, 16 (12):4002–4005, August 2023. CODEN ???? ISSN 2150-8097.

Peng:2023:AAC

[3495] Yuchen Peng, Ke Chen, Lidan Shou, Dawei Jiang, and Gang Chen. AQUA: Automatic collaborative query processing in analytical database. *Proceedings*

of the VLDB Endowment, 16(12):4006–4009, August 2023. CODEN ???? ISSN 2150-8097.

Huang:2023:VBG

[3496] Kai Huang, Houdong Liang, Chongchong Yao, Xi Zhao, Yue Cui, Yao Tian, Ruiyuan Zhang, and Xiaofang Zhou. VisualNeo: Bridging the gap between visual query interfaces and graph query engines. *Proceedings of the VLDB Endowment*, 16(12):4010–4013, August 2023. CODEN ???? ISSN 2150-8097.

Bellomarini:2023:KRI

[3497] Luigi Bellomarini, Marco Benedetti, Andrea Gentili, Davide Magnanimi, and Emanuel Sallinger. KG-Roar: Interactive Datalog-based reasoning on virtual knowledge graphs. *Proceedings of the VLDB Endowment*, 16(12):4014–4017, August 2023. CODEN ???? ISSN 2150-8097.

Schafer:2023:UBD

[3498] Nico Schäfer, Damjan Gjurovski, Angjela Davitkova, and Sebastian Michel. To UDFs and beyond: Demonstration of a fully decomposed data processor for general data wrangling tasks. *Proceedings of the VLDB Endowment*, 16(12):4018–4021, August 2023. CODEN ???? ISSN 2150-8097.

Liu:2023:CAH

[3499] Yushi Liu, Liwei Yuan, Zhihao Chen, Yekai Yu, Zhao Zhang, Cheqing Jin, and Ying Yan. ChainDash: an ad-hoc blockchain data analytics system. *Proceedings of the VLDB Endowment*, 16 (12):4022–4025, August 2023. CODEN ???? ISSN 2150-8097.

Zecchini:2023:BER

[3500] Luca Zecchini, Giovanni Simonini, Sonia Bergamaschi, and Felix Naumann. BrewER: Entity resolution on-demand. *Proceedings of the VLDB Endowment*, 16(12):4026–4029, August 2023. CODEN ???? ISSN 2150-8097.

Chen:2023:VSF

[3501] Fanchao Chen, Dixin Tang, Haotian Li, and Aditya G. Parameswaran. Visualizing spreadsheet formula graphs compactly. *Proceedings of the VLDB Endowment*, 16(12):4030–4033, August 2023. CODEN ???? ISSN 2150-8097.

tenWolde:2023:DBS

[3502] Daniel ten Wolde, Gábor Szárnyas, and Peter Boncz. DuckPGQ: Bringing SQL/PGQ to DuckDB. *Proceedings of the VLDB Endowment*, 16(12): 4034–4037, August 2023. CODEN ???? ISSN 2150-8097.

Bai:2023:DQS

[3503] Qiushi Bai, Sadeem Alsudais, and Chen Li. Demo of QueryBooster: Supporting middleware-based SQL query rewriting as a service. *Proceedings of the VLDB Endowment*, 16(12):4038–4041, August 2023. CODEN ???? ISSN 2150-8097.

Wu:2023:WCU

[3504] Weiyuan Wu, Pei Wang, Yi Xie, Yejia Liu, George Chow, and Jiannan Wang. Web Connector: a unified API wrapper to simplify Web data collection. *Proceedings of the VLDB Endowment*, 16 (12):4042–4045, August 2023. CODEN ???? ISSN 2150-8097.

Gao:2023:FRR

[3505] Dawei Gao, Daoyuan Chen, Zitao Li, Yuexiang Xie, Xuchen Pan, Yaliang Li, Bolin Ding, and Jingren Zhou. FS-Real: a real-world cross-device federated learning platform. *Proceedings of the VLDB Endowment*, 16(12):4046–4049, August 2023. CODEN ???? ISSN 2150-8097.

Song:2023:AAD

[3506] Xintong Song, Yusen Zhu, Jianfei Wu, Bai Liu, and Hongkang Wei. ADOps: an anomaly detection pipeline in structured logs. *Proceedings of the VLDB Endowment*, 16(12):4050–4053, August 2023. CODEN ???? ISSN 2150-8097.

Spenger:2023:PSM

[3507] Jonas Spenger, Chengyang Huang, Philipp Haller, and Paris Carbone. Portals: a showcase of multi-dataflow stateful serverless. *Proceedings of the VLDB Endowment*, 16(12):4054–4057, August 2023. CODEN ???? ISSN 2150-8097.

Singh:2023:CLS

[3508] Mukul Singh, José Cambronero Sanchez, Sumit Gulwani, Vu Le, Carina Negreanu, and Gust Verbruggen. Cornet: Learning spreadsheet formatting rules by example. *Proceedings of the VLDB Endowment*, 16(12):4058–4061, August 2023. CODEN ???? ISSN 2150-8097.

Qian:2023:FIS

[3509] Chen Qian, Shiwei Liang, Zhaoyang Wang, and Yin Lou. Fanglue: an interactive system for decision rule crafting. *Proceedings of the VLDB Endowment*, 16(12):4062–4065, August 2023. CODEN ???? ISSN 2150-8097.

Paparrizos:2023:OEE

[3510] John Paparrizos and Sai Prasanna Teja Reddy. Odyssey: an engine enabling the time-series clustering journey. *Proceedings of the VLDB Endowment*, 16 (12):4066–4069, August 2023. CODEN ???? ISSN 2150-8097.

Li:2023:EQR

[3511] Jinyang Li, Alon Silberstein, Yuval Moskovitch, Julia Stoyanovich, and H. V. Jagadish. Erica: Query refinement for diversity constraint satisfaction. *Proceedings of the VLDB Endowment*, 16(12):4070–4073, August 2023. CODEN ???? ISSN 2150-8097.

Chen:2023:LMG

[3512] Zui Chen, Lei Cao, and Sam Madden. Lingua Manga : a generic large language model centric system for data curation. *Proceedings of the VLDB Endowment*, 16(12):4074–4077, August 2023. CODEN ???? ISSN 2150-8097.

Gavriilidis:2023:XAD

[3513] Haralampos Gavriilidis, Leonhard Rose, Joel Ziegler, Kaustubh Beedkar, Jorge-Arnulfo Quiané-Ruiz, and Volker Markl. XDB in action: Decentralized cross-database query processing for black-box DBMSes. *Proceedings of the VLDB Endowment*, 16(12): 4078–4081, August 2023. CODEN ???? ISSN 2150-8097.

Kakkar:2023:IDE

[3514] Gaurav Tarlok Kakkar, Aryan Rajoria, Myna Prasanna Kalluraya, Ashmita Raju, Jiashen Cao, Kexin Rong, and Joy Arulraj. Interactive demonstration of EVA. *Proceedings of the VLDB Endowment*, 16(12):4082–4085,

August 2023. CODEN ???? ISSN 2150-8097.

Li:2023:RSO

[3515] Xiling Li, Gefei Tan, Xiao Wang, Jennie Rogers, and Soamar Homsi. RESCU-SQL: Oblivious querying for the zero trust cloud. *Proceedings of the VLDB Endowment*, 16(12):4086–4089, August 2023. CODEN ???? ISSN 2150-8097.

Abdelaziz:2023:DST

[3516] Ibrahim Abdelaziz, Julian Dolby, Udayan Khurana, Horst Samulowitz, and Kavitha Srinivas. DataRinse: Semantic transforms for data preparation based on code mining. *Proceedings of the VLDB Endowment*, 16(12):4090–4093, August 2023. CODEN ???? ISSN 2150-8097.

Wang:2023:DAA

[3517] Junxiong Wang, Mitchell Gray, Immanuel Trummer, Ahmet Kara, and Dan Olteanu. Demonstrating ADOPT: Adaptively optimizing attribute orders for worst-case optimal joins via reinforcement learning. *Proceedings of the VLDB Endowment*, 16(12):4094–4097, August 2023. CODEN ???? ISSN 2150-8097.

Trummer:2023:DGD

[3518] Immanuel Trummer. Demonstrating GPT-DB: Generating query-specific and customizable code for SQL processing with GPT-4. *Proceedings of the VLDB Endowment*, 16(12):4098–4101, August 2023. CODEN ???? ISSN 2150-8097.

deAlmeida:2023:SVA

[3519] Vicente Nejar de Almeida, Eduardo Ribeiro, Nassim Bouarour, João Luiz Dihl Comba, and Sihem Amer-Yahia. SHEVA: a visual analytics system for statistical hypothesis exploration. *Proceedings of the VLDB Endowment*, 16(12):4102–4105, August 2023. CODEN ???? ISSN 2150-8097.

Qiao:2023:PGI

[3520] Shi Qiao and Alekh Jindal. PikePlace: Generating intelligence for marketplace datasets. *Proceedings of the VLDB Endowment*, 16(12):4106–4109, August 2023. CODEN ???? ISSN 2150-8097.

Zhou:2023:LQR

[3521] Xuanhe Zhou, Guoliang Li, Jianming Wu, Jiesi Liu, Zhaoyan Sun, and Xinning Zhang. A learned query rewrite system. *Proceedings of the VLDB Endowment*, 16(12):4110–4113, August 2023. CODEN ???? ISSN 2150-8097.

Halevy:2023:WLR

[3522] Alon Halevy, Yejin Choi, Avrilia Floratou, Michael J. Franklin, Natasha Noy, and Haixun Wang. Will LLMs reshape, supercharge, or kill data science? (VLDB 2023 panel). *Proceedings of the VLDB Endowment*, 16(12):4114–4115, August 2023. CODEN ???? ISSN 2150-8097.

Cheung:2023:TAG

[3523] Alvin Cheung, Maaz Bin Safeer Ahmad, Brandon Haynes, Chanwut Kittivorawong, Shadaj Laddad, Xiaoxuan Liu, Chenglong Wang, and Cong Yan. Towards auto-generated data systems. *Proceedings of the VLDB Endowment*, 16(12):4116–4129, August 2023. CODEN ???? ISSN 2150-8097.

Dong:2023:GKG

[3524] Xin Luna Dong. Generations of knowledge graphs: The crazy ideas and the business impact. *Proceedings of the VLDB Endowment*, 16(12):4130–4137, August 2023. CODEN ???? ISSN 2150-8097.

Gonzalez:2023:SGS

[3525] Joseph E. Gonzalez and Yucheng Low. The story of GraphLab — from scaling machine learning to shaping graph systems research (VLDB 2023 Test-of-Time Award talk). *Proceedings of the VLDB Endowment*, 16(12):4138, August 2023. CODEN ???? ISSN 2150-8097.

Choi:2023:CSD

[3526] Yejin Choi. Common sense: The dark matter of language and intelligence (VLDB 2023 keynote). *Proceedings of the VLDB Endowment*, 16(12):4139, August 2023. CODEN ???? ISSN 2150-8097.

Li:2023:MDC

[3527] Feifei Li. Modernization of databases in the cloud era: Building databases that run like Legos. *Proceedings of the VLDB Endowment*, 16(12):4140–4151, August 2023. CODEN ???? ISSN 2150-8097.

Milic-Frayling:2023:CCT

[3528] Natasa Milic-Frayling. On the cusp: Computing thrills and perils and professional awakening. *Proceedings of the VLDB Endowment*, 16(12):4152–4159, August 2023. CODEN ???? ISSN 2150-8097.

Qiu:2023:DDO

[3529] Lina Qiu, Georgios Kellaris, Nikos Mamoulis, Kobbi Nissim, and George Kollios. Doquet: Differentially oblivious range and join queries with private data structures. *Proceedings of the VLDB Endowment*, 16(13):4160–4173, September 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3625054.3625055`.

Chiosa:2023:AAC

[3530] Monica Chiosa, Thomas B. Preußer, Michaela Blott, and Gustavo Alonso. AMNES: Accelerating the computation of data correlation using FPGAs. *Proceedings of the VLDB Endowment*, 16(13):4174–4187, September 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3625054.3625056`.

Daum:2023:VPY

[3531] Maureen Daum, Enhao Zhang, Dong He, Stephen Mussmann, Brandon Haynes, Ranjay Krishna, and Magdalena Balazinska. VOCALExplore: Pay-as-you-go video data exploration and model building. *Proceedings of the VLDB Endowment*, 16(13):4188–4201, September 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3625054.3625057`.

Arora:2023:FRA

[3532] Pankaj Arora, Surajit Chaudhuri, Sudipto Das, Junfeng Dong, Cyril George, Ajay Kalhan, Arnd Christian König, Willis Lang, Changsong Li, Feng Li, Jiaqi Liu, Lukas M. Maas, Akshay Mata, Ishai Menache, Justin Moeller, Vivek Narasayya, Matthaios Olma, Morgan Oslake, Elnaz Rezai, Yi Shan, Manoj Syamala, Shize Xu, and Vasileios Zois. Flexible resource allocation for relational database-as-a-service. *Proceedings of the VLDB Endowment*, 16(13):4202–4215, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625058.

Gu:2023:SEA

[3533] Rong Gu, Han Li, Haipeng Dai, Wenjie Huang, Jie Xue, Meng Li, Jiaqi Zheng, Haoran Cai, Yihua Huang, and Guihai Chen. ShadowAQP: Efficient approximate group-by and join query via attribute-oriented sample size allocation and data generation. *Proceedings of the VLDB Endowment*, 16(13):4216–4229, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625059.

Liu:2023:ODP

[3534] Rui Liu, Kwanghyun Park, Fotis Psallidas, Xiaoyong Zhu, Jinghui Mo, Rathijit Sen, Matteo Interlandi, Konstantinos Karanasos, Yuanyuan Tian, and Jesús Camacho-Rodríguez. Optimizing data pipelines for machine learning in feature stores. *Proceedings of the VLDB Endowment*, 16(13):4230–4239, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625060.

Angles:2023:SSE

[3535] Renzo Angles, Georg Gottlob, Aleksandar Pavlović, Reinhard Pichler, and Emanuel Sallinger. SparqLog: a system for efficient evaluation of SPARQL 1.1 queries via Datalog. *Proceedings of the VLDB Endowment*, 16(13):4240–4253, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625061.

Konig:2023:SLC

[3536] Arnd Christian König, Yi Shan, Karan Newatia, Luke Marshall, and Vivek Narasayya. Solver-in-the-loop cluster resource management for database-as-a-service. *Proceedings of the VLDB Endowment*, 16(13):4254–4267, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625062.

Henneberg:2023:REH

[3537] Justus Henneberg and Felix Schuhknecht. RTIndeX: Exploiting hardware-accelerated GPU raytracing for database indexing. *Proceedings of the VLDB Endowment*, 16(13):4268–4281, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625063.

Lian:2023:CCT

[3538] Jinqing Lian, Xinyi Zhang, Yingxia Shao, Zenglin Pu, Qingfeng Xiang, Yawen Li, and Bin Cui. ContTune: Continuous tuning by conservative Bayesian optimization for distributed stream data processing systems. *Proceedings of the VLDB Endowment*, 16(13):4282–4295, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625064.

Melissourgos:2023:SUS

[3539] Dimitrios Melissourgos, Haibo Wang, Shigang Chen, Chaoyi Ma, and Shiping Chen. Single update sketch with variable counter structure. *Proceedings of the VLDB Endowment*, 16(13):4296–4309, September 2023. CODEN ???? ISSN 2150-8097. URL https://

dl.acm.org/doi/10.14778/3625054.3625065.

Trummer:2023:CLL

[3540] Immanuel Trummer. Can large language models predict data correlations from column names? *Proceedings of the VLDB Endowment*, 16(13): 4310–4323, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625066.

Chamani:2023:GTO

[3541] Javad Ghareh Chamani, Ioannis Demertzis, Dimitrios Papadopoulos, Charalampos Papamanthou, and Rasool Jalili. GraphOS: Towards oblivious graph processing. *Proceedings of the VLDB Endowment*, 16(13): 4324–4338, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625067.

Wang:2023:COC

[3542] Kefei Wang and Feng Chen. Catalyst: Optimizing cache management for large in-memory key-value systems. *Proceedings of the VLDB Endowment*, 16(13):4339–4352, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3625054.3625068.

Zheng:2023:DDL

[3543] Bolong Zheng, Yongyong Gao, Jingyi Wan, Lingsen Yan, Long Hu, Bo Liu, Yunjun Gao, Xiaofang Zhou, and Christian S. Jensen. DecLog: Decentralized logging in non-volatile memory for time series database systems. *Proceedings of the VLDB Endowment*, 17(1):1–14, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617839.

Zhang:2023:EDW

[3544] Fangyuan Zhang, Mengxu Jiang, and Sibo Wang. Efficient dynamic weighted set sampling and its extension. *Proceedings of the VLDB Endowment*, 17 (1):15–27, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617840.

Lin:2023:ZLI

[3545] Yiming Lin and Sharad Mehrotra. ZIP: Lazy imputation during query processing. *Proceedings of the VLDB Endowment*, 17(1):28–40, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617841.

Li:2023:FTA

[3546] Xunkai Li, Zhengyu Wu, Wentao Zhang, Yinlin Zhu, Rong-Hua Li, and Guoren Wang. FedGTA: Topology-aware averaging for federated graph learning. *Proceedings of the VLDB Endowment*, 17(1):41–50, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617842.

Chang:2023:HPM

[3547] Xueqin Chang, Xiangyu Ke, Lu Chen, Congcong Ge, Ziheng Wei, and Yunjun Gao. Host profit maximization: Leveraging performance incentives and user flexibility. *Proceedings of the VLDB Endowment*, 17(1):51–64, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617843.

Patwa:2023:DPP

[3548] Shweta Patwa, Danyu Sun, Amir Gilad, Ashwin Machanavajjhala, and Sudeepa Roy. DP-PQD: Privately detecting per-query gaps in synthetic data generated by black-box mechanisms. *Proceedings of the VLDB Endowment*, 17(1):65–78, September 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3617838.3617844.

Wei:2023:CSP

[3549] Ruidi Wei and Florian Kerschbaum. Cryptographically secure private record linkage using locality-sensitive hashing. *Proceedings of the VLDB Endowment*, 17(2):79–91, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626293.

Arora:2023:LME

[3550] Simran Arora, Brandon Yang, Sabri Eyuboglu, Avanika Narayan, Andrew Hojel, Immanuel Trummer, and Christopher Ré. Language models enable simple systems for generating structured views of heterogeneous data lakes. *Proceedings of the VLDB Endowment*, 17(2):92–105, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626294.

Li:2023:QRD

[3551] Jinyang Li, Yuval Moskovitch, Julia Stoyanovich, and H. V. Jagadish. Query refinement for diversity constraint satisfaction. *Proceedings of the VLDB Endowment*, 17(2):106–118, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626295.

Li:2023:EEL

[3552] Zhaoheng Li, Pranav Gor, Rahul Prabhu, Hui Yu, Yuzhou Mao, and Yongjoo Park. ElasticNotebook: Enabling live migration for computational notebooks. *Proceedings of the VLDB Endowment*, 17(2):119–133, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626296.

Huang:2023:BNL

[3553] Kecheng Huang, Zhaoyan Shen, Zili Shao, Tong Zhang, and Feng Chen. Breathing new life into an old tree: Resolving logging dilemma of B^+-tree on modern computational storage drives. *Proceedings of the VLDB Endowment*, 17(2):134–147, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626297.

Zeng:2023:EEC

[3554] Xinyu Zeng, Yulong Hui, Jiahong Shen, Andrew Pavlo, Wes McKinney, and Huanchen Zhang. An empirical evaluation of columnar storage formats. *Proceedings of the VLDB Endowment*, 17(2):148–161, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626298.

Yuan:2023:EGA

[3555] Yichao Yuan, Haojie Ye, Sanketh Vedula, Wynn Kaza, and Nishil Talati. Everest: GPU-accelerated system for mining temporal motifs. *Proceedings of the VLDB Endowment*, 17

(2):162–174, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626299.

Wu:2023:BSB

[3556] Xueyi Wu, Yuanyuan Xu, Wenjie Zhang, and Ying Zhang. Billion-scale bipartite graph embedding: a global-local induced approach. *Proceedings of the VLDB Endowment*, 17 (2):175–183, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626300.

Ni:2023:UAP

[3557] Wangze Ni, Pengze Chen, Lei Chen, Peng Cheng, Chen Jason Zhang, and Xuemin Lin. Utility-aware payment channel network rebalance. *Proceedings of the VLDB Endowment*, 17 (2):184–196, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626301.

Li:2023:AAB

[3558] Pengfei Li, Wenqing Wei, Rong Zhu, Bolin Ding, Jingren Zhou, and Hua Lu. ALECE: an attention-based learned cardinality estimator for SPJ queries on dynamic workloads. *Proceedings of the VLDB Endowment*, 17(2):197–210, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626302.

Xia:2023:FLE

[3559] Haojun Xia, Zhen Zheng, Yuchao Li, Donglin Zhuang, Zhongzhu Zhou, Xiafei Qiu, Yong Li, Wei Lin, and Shuaiwen Leon Song. Flash-LLM: Enabling cost-effective and highly-efficient large generative model inference with unstructured sparsity. *Proceedings of the VLDB Endowment*, 17(2):211–224, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626303.

Howard:2023:CCF

[3560] Heidi Howard, Fritz Alder, Edward Ashton, Amaury Chamayou, Sylvan Clebsch, Manuel Costa, Antoine Delignat-Lavaud, Cédric Fournet, Andrew Jeffery, Matthew Kerner, Fotios Kounelis, Markus A. Kuppe, Julien Maffre, Mark Russinovich, and Christoph M. Wintersteiger. Confidential consortium framework: Secure multiparty applications with confidentiality, integrity, and high availability. *Proceedings of the VLDB Endowment*, 17(2):225–240, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626304.

Duan:2023:VVL

[3561] Sijing Duan, Feng Lyu, Xin Zhu, Yi Ding, Haotian Wang, Desheng Zhang, Xue Liu, Yaoxue Zhang, and Ju Ren. VeLP: Vehicle loading plan learning from human behavior in nationwide logistics system. *Proceedings of the VLDB Endowment*, 17 (2):241–249, October 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626305.

Naik:2023:RQS

[3562] Aaditya Naik, Aalok Thakkar, Adam Stein, Rajeev Alur, and Mayur Naik. Relational query synthesis $\bowtie$ decision tree learning. *Proceedings of the VLDB Endowment*, 17(2):250–263, October

2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3626292.3626306.

Yao:2023:RRA

[3563] Feng Yao, Qian Tao, Wenyuan Yu, Yanfeng Zhang, Shufeng Gong, Qiange Wang, Ge Yu, and Jingren Zhou. RAGraph: a region-aware framework for geo-distributed graph processing. *Proceedings of the VLDB Endowment*, 17(3):264–277, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632094.

Lin:2023:SDB

[3564] Qiuru Lin, Sai Wu, Junbo Zhao, Jian Dai, Meng Shi, Gang Chen, and Feifei Li. SmartLite: a DBMS-Based serving system for DNN inference in resource-constrained environments. *Proceedings of the VLDB Endowment*, 17(3):278–291, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632095.

Wu:2023:BMC

[3565] Shiwen Wu, Qiyu Wu, Honghua Dong, Wen Hua, and Xiaofang Zhou. Blocker and matcher can mutually benefit: a co-learning framework for low-resource entity resolution. *Proceedings of the VLDB Endowment*, 17(3): 292–304, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632096.

Ang:2023:TTS

[3566] Yihao Ang, Qiang Huang, Yifan Bao, Anthony K. H. Tung, and Zhiyong Huang. TSGBench: Time series generation benchmark. *Proceedings of the VLDB Endowment*, 17(3): 305–318, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632097.

Punter:2023:OEM

[3567] Wieger R. Punter, Odysseas Papapetrou, and Minos Garofalakis. OmniSketch: Efficient multi-dimensional high-velocity stream analytics with arbitrary predicates. *Proceedings of the VLDB Endowment*, 17(3):319–331, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632098.

Chung:2023:MBK

[3568] Kai Hiu Chung, Alexander Zhou, Yue Wang, and Lei Chen. Maximum balanced (k, ϵ)-bitruss detection in signed bipartite graph. *Proceedings of the VLDB Endowment*, 17(3): 332–344, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632099.

Li:2023:MVI

[3569] Xiao Li, Huan Li, Hua Lu, Christian S. Jensen, Varun Pandey, and Volker Markl. Missing value imputation for multi-attribute sensor data streams via message propagation. *Proceedings of the VLDB Endowment*, 17(3):345–358, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632100.

Chen:2023:IID

[3570] Yuhang Chen, Chaoyun Zhang, Minghua Ma, Yudong Liu, Ruomeng Ding, Bowen Li, Shilin He, Saravan Rajmohan, Qingwei Lin, and Dongmei Zhang. ImDiffusion: Imputed diffusion models for multivariate time series anomaly detection. *Proceedings of the VLDB Endowment*, 17(3): 359–372, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632101`.

Sun:2023:CIP

[3571] Dajun Sun, Wei Dong, and Ke Yi. Confidence intervals for private query processing. *Proceedings of the VLDB Endowment*, 17(3):373–385, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632102`.

Liang:2023:SBF

[3572] Zhiyu Liang, Jianfeng Zhang, Chen Liang, Hongzhi Wang, Zheng Liang, and Lujia Pan. A shapelet-based framework for unsupervised multivariate time series representation learning. *Proceedings of the VLDB Endowment*, 17(3):386–399, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632103`.

Wang:2023:FSE

[3573] Letong Wang, Xiangyun Ding, Yan Gu, and Yihan Sun. Fast and space-efficient parallel algorithms for influence maximization. *Proceedings of the VLDB Endowment*, 17(3):400–413, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632104`.

Chen:2023:TEF

[3574] Yile Chen, Gao Cong, and Cuauhtemoc Anda. TERI: an effective framework for trajectory recovery with irregular time intervals. *Proceedings of the VLDB Endowment*, 17(3):414–426, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632105`.

Chen:2023:DGS

[3575] Yuhan Chen, Haojie Ye, Sanketh Vedula, Alex Bronstein, Ronald Dreslinski, Trevor Mudge, and Nishil Talati. Demystifying graph sparsification algorithms in graph properties preservation. *Proceedings of the VLDB Endowment*, 17(3):427–440, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632106`.

Cao:2023:GDS

[3576] Jiashen Cao, Rathijit Sen, Matteo Interlandi, Joy Arulraj, and Hyesoon Kim. GPU database systems characterization and optimization. *Proceedings of the VLDB Endowment*, 17(3):441–454, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632107`.

Chen:2023:NDG

[3577] Chaoyi Chen, Dechao Gao, Yanfeng Zhang, Qiange Wang, Zhenbo Fu, Xuecang Zhang, Junhua Zhu, Yu Gu, and Ge Yu. NeutronStream: a dynamic GNN training framework with sliding window for graph streams. *Proceedings of the VLDB Endowment*, 17(3):

455–468, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632108`.

Hildred:2023:CLL

[3578] Joshua Hildred, Michael Abebe, and Khuzaima Daudjee. Caerus: Low-latency distributed transactions for geo-replicated systems. *Proceedings of the VLDB Endowment*, 17(3):469–482, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632109`.

Zhang:2023:EEA

[3579] Aoqian Zhang, Shuqing Deng, Dongping Cui, Ye Yuan, and Guoren Wang. An experimental evaluation of anomaly detection in time series. *Proceedings of the VLDB Endowment*, 17(3):483–496, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632110`.

Singh:2023:FAE

[3580] Mukul Singh, José Cambronero, Sumit Gulwani, Vu Le, Carina Negreanu, Elnaz Nouri, Mohammad Raza, and Gust Verbruggen. FormaT5: Abstention and examples for conditional table formatting with natural language. *Proceedings of the VLDB Endowment*, 17(3):497–510, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632111`.

Schonberger:2023:QID

[3581] Manuel Schönberger, Immanuel Trummer, and Wolfgang Mauerer. Quantum-inspired digital annealing for join ordering. *Proceedings of the VLDB Endowment*, 17(3):511–524, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632112`.

Musleh:2023:KSB

[3582] Mashaal Musleh and Mohamed F. Mokbel. Kamel: a scalable BERT-based system for trajectory imputation. *Proceedings of the VLDB Endowment*, 17(3):525–538, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632113`.

Zhang:2023:ETL

[3583] Xinyi Zhang, Hong Wu, Yang Li, Zhengju Tang, Jian Tan, Feifei Li, and Bin Cui. An efficient transfer learning based configuration adviser for database tuning. *Proceedings of the VLDB Endowment*, 17(3):539–552, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632114`.

Petralia:2023:ATT

[3584] Adrien Petralia, Philippe Charpentier, and Themis Palpanas. ADF & TransApp: a transformer-based framework for appliance detection using smart meter consumption series. *Proceedings of the VLDB Endowment*, 17(3):553–562, November 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3632093.3632115`.

Wooders:2023:RAA

[3585] Sarah Wooders, Xiangxi Mo, Amit Narang, Kevin Lin, Ion Stoica, Joseph M. Hellerstein, Natacha

Crooks, and Joseph E. Gonzalez. RALF: Accuracy-aware scheduling for feature store maintenance. *Proceedings of the VLDB Endowment*, 17(3): 563–576, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632116.

Huang:2023:ALH

[3586] Kaisong Huang, Tianzheng Wang, Qingqing Zhou, and Qingzhong Meng. The art of latency hiding in modern database engines. *Proceedings of the VLDB Endowment*, 17(3):577–590, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632117.

Najafi:2023:MSN

[3587] Mohammad Matin Najafi, Chenhao Ma, Xiaodong Li, Reynold Cheng, and Laks V. S. Lakshmanan. MOSER: Scalable network Motif discovery using serial test. *Proceedings of the VLDB Endowment*, 17(3):591–603, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632118.

Zhang:2023:CMP

[3588] Dongxiang Zhang, Teng Ma, Junnan Hu, Yijun Bei, Kian-Lee Tan, and Gang Chen. Co-movement pattern mining from videos. *Proceedings of the VLDB Endowment*, 17(3): 604–616, November 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3632093.3632119.

Ge:2023:EAS

[3589] Qian Ge, Yu Liu, Yinghao Zhao, Yuetian Sun, Lei Zou, Yuxing Chen, and Anqun Pan. Efficient and accurate SimRank-based similarity joins: Experiments, analysis, and improvement. *Proceedings of the VLDB Endowment*, 17(4):617–629, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636219.

Li:2023:ERN

[3590] Wentao Li, Maolin Cai, Min Gao, Dong Wen, Lu Qin, and Wei Wang. Expanding reverse nearest neighbors. *Proceedings of the VLDB Endowment*, 17 (4):630–642, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636220.

Zhao:2023:ESO

[3591] Fuheng Zhao, Divyakant Agrawal, Amr El Abbadi, Ahmed Metwally, Claire Mathieu, and Michel de Rougemont. Errata for "SpaceSaving±: an Optimal Algorithm for Frequency Estimation and Frequent Items in the Bounded-Deletion Model". *Proceedings of the VLDB Endowment*, 17(4):643, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636221. See [2900].

Siddiqui:2023:CET

[3592] Tarique Siddiqui, Vivek Narasayya, Marius Dumitru, and Surajit Chaudhuri. Cache-efficient top-k aggregation over high cardinality large datasets. *Proceedings of the VLDB Endowment*, 17(4):644–656, December

2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636222.

Cai:2023:ETB

[3593] Xinwei Cai, Xiangyu Ke, Kai Wang, Lu Chen, Tianming Zhang, Qing Liu, and Yunjun Gao. Efficient temporal butterfly counting and enumeration on temporal bipartite graphs. *Proceedings of the VLDB Endowment*, 17(4): 657–670, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636223.

Zhong:2023:TTB

[3594] Tianxiong Zhong, Zhiwei Zhang, Guo Lu, Ye Yuan, Yu-Ping Wang, and Guoren Wang. TVM: a tile-based video management framework. *Proceedings of the VLDB Endowment*, 17 (4):671–684, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636224.

Zhang:2023:SCR

[3595] Yi Zhang, Jan Deriu, George Katsogiannis-Meimarakis, Catherine Kosten, Georgia Koutrika, and Kurt Stockinger. ScienceBenchmark: a complex real-world benchmark for evaluating natural language to SQL systems. *Proceedings of the VLDB Endowment*, 17 (4):685–698, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636225.

Chen:2023:DMS

[3596] Lu Chen, Chengfei Liu, Rui Zhou, Kewen Liao, Jiajie Xu, and Jianxin Li. Densest multipartite subgraph search in heterogeneous information networks. *Proceedings of the VLDB Endowment*, 17(4):699–711, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636226.

Nagrecha:2023:SOD

[3597] Kabir Nagrecha and Arun Kumar. Saturn: an optimized data system for multi-large-model deep learning workloads. *Proceedings of the VLDB Endowment*, 17(4):712–725, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636227.

Cai:2023:BTF

[3598] Miao Cai, Junru Shen, Yifan Yuan, Zhihao Qu, and Baoliu Ye. BonsaiKV: Towards fast, scalable, and persistent key–value stores with tiered, heterogeneous memory system. *Proceedings of the VLDB Endowment*, 17 (4):726–739, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636228.

Reiner:2023:SEC

[3599] Silvan Reiner and Michael Grossniklaus. Sample-efficient cardinality estimation using geometric deep learning. *Proceedings of the VLDB Endowment*, 17(4):740–752, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636229.

Zhao:2023:MTS

[3600] Kai Zhao, Chenjuan Guo, Yunyao Cheng, Peng Han, Miao Zhang, and Bin Yang. Multiple time series forecasting with dynamic graph modeling. *Proceedings of the VLDB Endowment*, 17(4):753–765, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636230.

Cheng:2023:WGA

[3601] Yunyao Cheng, Peng Chen, Chenjuan Guo, Kai Zhao, Qingsong Wen, Bin Yang, and Christian S. Jensen. Weakly guided adaptation for robust time series forecasting. *Proceedings of the VLDB Endowment*, 17(4):766–779, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636231.

Yang:2023:ACA

[3602] Rui Yang, Evgenios M. Kornaropoulos, and Yue Cheng. Algorithmic complexity attacks on dynamic learned indexes. *Proceedings of the VLDB Endowment*, 17(4):780–793, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636232.

Zhu:2023:MDC

[3603] Jiaqi Zhu, Shaofeng Cai, Fang Deng, Beng Chin Ooi, and Wenqiao Zhang. METER: a dynamic concept adaptation framework for online anomaly detection. *Proceedings of the VLDB Endowment*, 17(4):794–807, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636233.

Zhang:2023:EAL

[3604] Hailin Zhang, Penghao Zhao, Xupeng Miao, Yingxia Shao, Zirui Liu, Tong Yang, and Bin Cui. Experimental analysis of large-scale learnable vector storage compression. *Proceedings of the VLDB Endowment*, 17(4):808–822, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636234.

Zhao:2023:CSC

[3605] Yue Zhao, Zhaodonghui Li, and Gao Cong. A comparative study and component analysis of query plan representation techniques in ML4DB studies. *Proceedings of the VLDB Endowment*, 17(4):823–835, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636235.

Zhuang:2023:TGD

[3606] Zeyang Zhuang, Penghui Li, Pingchuan Ma, Wei Meng, and Shuai Wang. Testing graph database systems via graph-aware metamorphic relations. *Proceedings of the VLDB Endowment*, 17 (4):836–848, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636236.

Cong:2023:OCE

[3607] Tianji Cong, Madelon Hulsebos, Zhenjie Sun, Paul Groth, and H. V. Jagadish. Observatory: Characterizing embeddings of relational tables. *Proceedings of the VLDB Endowment*, 17(4):849–862, December 2023. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3636218.3636237.

Kim:2023:FAD

[3608] Taeyoon Kim, ChanHo Park, Mansur Mukimbekov, Heelim Hong, Minseok Kim, Ze Jin, Changdae Kim, Ji-Yong Shin, and Myeongjae Jeon. FusionFlow: Accelerating data preprocessing for machine learning with CPU–GPU cooperation. *Proceedings of the VLDB Endowment*, 17(4):863–876, December 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3636218.3636238`.

Mohr-Daurat:2023:BAD

[3609] Hubert Mohr-Daurat, Xuan Sun, and Holger Pirk. BOSS — an architecture for database kernel composition. *Proceedings of the VLDB Endowment*, 17(4):877–890, December 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3636218.3636239`.

Zhi:2023:CBC

[3610] Xiangyu Zhi, Xiao Yan, Bo Tang, Ziyao Yin, Yanchao Zhu, and Minqi Zhou. CoroGraph: Bridging cache efficiency and work efficiency for graph algorithm execution. *Proceedings of the VLDB Endowment*, 17(4):891–903, December 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3636218.3636240`.

Cheng:2023:MSO

[3611] Audrey Cheng, Jack Waudby, Hugo Firth, Natacha Crooks, and Ion Stoica. Mammoths are slow: The overlooked transactions of graph data. *Proceedings of the VLDB Endowment*, 17(4):904–911, December 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3636218.3636241`.

Zhou:2023:VVS

[3612] Enyuan Zhou, Song Guo, Zicong Hong, Christian S. Jensen, Yang Xiao, Dalin Zhang, Jinwen Liang, and Qingqi Pei. VeriDKG: a verifiable SPARQL query engine for decentralized knowledge graphs. *Proceedings of the VLDB Endowment*, 17(4):912–925, December 2023. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3636218.3636242`.

Weng:2024:EEP

[3613] Lianggui Weng, Rong Zhu, Di Wu, Bolin Ding, Bolong Zheng, and Jingren Zhou. Eraser: Eliminating performance regression on learned query optimizer. *Proceedings of the VLDB Endowment*, 17(5):926–938, January 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3641204.3641205`.

Zhang:2024:HNB

[3614] Chao Zhang, Guoliang Li, and Tao Lv. HyBench: a new benchmark for HTAP databases. *Proceedings of the VLDB Endowment*, 17(5):939–951, January 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3641204.3641206`.

Tae:2024:FFA

[3615] Ki Hyun Tae, Hantian Zhang, Jaeyoung Park, Kexin Rong, and Steven Euijong Whang. Falcon: Fair active learning using multi-armed bandits. *Proceedings of the VLDB Endowment*, 17(5):952–965, January 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3641204.3641207`.

Wu:2024:BSC

[3616] Honghu Wu, Xiangrong Zhu, and Wei Hu. A blockchain system for clustered federated learning with peer-to-peer knowledge transfer. *Proceedings of the VLDB Endowment*, 17

(5):966–979, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641208.

Zhu:2024:PSD

[3617] Rong Zhu, Lianggui Weng, Wenqing Wei, Di Wu, Jiazhen Peng, Yifan Wang, Bolin Ding, Defu Lian, Bolong Zheng, and Jingren Zhou. PilotScope: Steering databases with machine learning drivers. *Proceedings of the VLDB Endowment*, 17(5):980–993, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641209.

Li:2024:TSO

[3618] Yishuai Li, Yunfeng Zhu, Chao Shi, Guanhua Zhang, Jianzhong Wang, and Xiaolu Zhang. Timestamp as a service, not an oracle. *Proceedings of the VLDB Endowment*, 17(5):994–1006, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641210.

Xing:2024:DDI

[3619] Junjie Xing, Xinyu Wang, and H. V. Jagadish. Data-driven insight synthesis for multi-dimensional data. *Proceedings of the VLDB Endowment*, 17(5):1007–1019, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641211.

Xing:2024:DNM

[3620] Naili Xing, Shaofeng Cai, Gang Chen, Zhaojing Luo, Beng Chin Ooi, and Jian Pei. Database native model selection: Harnessing deep neural networks in database systems. *Proceedings of the VLDB Endowment*, 17(5):1020–1033, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641212.

Chen:2024:QSD

[3621] Kaiyu Chen, Dong Wen, Wenjie Zhang, Ying Zhang, Xiaoyang Wang, and Xuemin Lin. Querying structural diversity in streaming graphs. *Proceedings of the VLDB Endowment*, 17(5):1034–1046, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641213.

Gou:2024:LSE

[3622] Xiangyang Gou, Xinyi Ye, Lei Zou, and Jeffrey Xu Yu. LM-SRPQ: Efficiently answering regular path query in streaming graphs. *Proceedings of the VLDB Endowment*, 17(5):1047–1059, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641214.

Gao:2024:EET

[3623] Shihong Gao, Yiming Li, Yanyan Shen, Yingxia Shao, and Lei Chen. ETC: Efficient training of temporal graph neural networks over large-scale dynamic graphs. *Proceedings of the VLDB Endowment*, 17(5):1060–1072, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641215.

Wu:2024:TFS

[3624] Chenyuan Wu, Mohammad Javad Amiri, Haoyun Qin, Bhavana Mehta, Ryan Marcus, and Boon Thau Loo. Towards full stack adaptivity in permissioned blockchains. *Proceedings of* the VLDB Endowment, 17(5):1073–1080, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641216.

Han:2024:BLC

[3625] Jindong Han, Weijia Zhang, Hao Liu, Tao Tao, Naiqiang Tan, and Hui Xiong. BigST: Linear complexity spatio-temporal graph neural network for traffic forecasting on large-scale road networks. *Proceedings of the VLDB Endowment*, 17(5):1081–1090, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641217.

Min:2024:SWO

[3626] Xinhao Min, Kai Lu, Pengyu Liu, Jiguang Wan, Changsheng Xie, Daohui Wang, Ting Yao, and Huatao Wu. SepHash: a write-optimized hash index on disaggregated memory via separate segment structure. *Proceedings of the VLDB Endowment*, 17(5):1091–1104, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641218.

Tang:2024:XBM

[3627] Dahai Tang, Jiali Wang, Rong Chen, Lei Wang, Wenyuan Yu, Jingren Zhou, and Kenli Li. XGNN: Boosting multi-GPU GNN training via global GNN memory store. *Proceedings of the VLDB Endowment*, 17(5):1105–1118, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641219.

Tao:2024:CEP

[3628] Youming Tao, Cheng-Long Wang, Miao Pan, Dongxiao Yu, Xiuzhen Cheng, and Di Wang. Communication efficient and provable federated unlearning. *Proceedings of the VLDB Endowment*, 17(5):1119–1131, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641220.

Gao:2024:TSE

[3629] Dawei Gao, Haibin Wang, Yaliang Li, Xiuyu Sun, Yichen Qian, Bolin Ding, and Jingren Zhou. Text-to-SQL empowered by large language models: a benchmark evaluation. *Proceedings of the VLDB Endowment*, 17(5):1132–1145, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641221.

Mai:2024:SPQ

[3630] Anh L. Mai, Pengyu Wang, Azza Abouzied, Matteo Brucato, Peter J. Haas, and Alexandra Meliou. Scaling package queries to a billion tuples via hierarchical partitioning and customized optimization. *Proceedings of the VLDB Endowment*, 17(5):1146–1158, January 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3641204.3641222.

Deng:2024:MIM

[3631] Yuhao Deng, Chengliang Chai, Lei Cao, Nan Tang, Jiayi Wang, Ju Fan, Ye Yuan, and Guoren Wang. MisDetect: Iterative mislabel detection using early loss. *Proceedings of the VLDB Endowment*, 17(6):1159–1172, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648161.

Fan:2024:CMA

[3632] Wenfei Fan, Muyang Liu, Shuhao Liu, and Chao Tian. Capturing more associations by referencing external graphs. *Proceedings of the VLDB Endowment*, 17(6):1173–1186, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648162.

Lin:2024:QEQ

[3633] Longlong Lin, Pingpeng Yuan, Rong-Hua Li, Chunxue Zhu, Hongchao Qin, Hai Jin, and Tao Jia. QTCS: Efficient query-centered temporal community search. *Proceedings of the VLDB Endowment*, 17(6):1187–1199, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648163.

Fu:2024:DAD

[3634] Jie Fu, Qingqing Ye, Haibo Hu, Zhili Chen, Lulu Wang, Kuncan Wang, and Xun Ran. DPSUR: Accelerating differentially private stochastic gradient descent using selective update and release. *Proceedings of the VLDB Endowment*, 17(6):1200–1213, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648164.

Erben:2024:HCW

[3635] Alexander Erben, Ruben Mayer, and Hans-Arno Jacobsen. How can we train deep learning models across clouds and continents? An experimental study. *Proceedings of the VLDB Endowment*, 17(6):1214–1226, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648165.

Park:2024:ASA

[3636] Jeongmin Brian Park, Vikram Sharma Mailthody, Zaid Qureshi, and Wen mei Hwu. Accelerating sampling and aggregation operations in GNN frameworks with GPU initiated direct storage accesses. *Proceedings of the VLDB Endowment*, 17(6):1227–1240, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648166.

Yuan:2024:CEG

[3637] Hao Yuan, Yajiong Liu, Yanfeng Zhang, Xin Ai, Qiange Wang, Chaoyi Chen, Yu Gu, and Ge Yu. Comprehensive evaluation of GNN training systems: a data management perspective. *Proceedings of the VLDB Endowment*, 17(6):1241–1254, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648167.

Chan:2024:LFH

[3638] Tsz Nam Chan, Rui Zang, Bojian Zhu, Leong Hou U., Dingming Wu, and Jianliang Xu. LION: Fast and high-resolution network kernel density visualization. *Proceedings of the VLDB Endowment*, 17(6):1255–1268, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648168.

Li:2024:PBP

[3639] Zitao Li, Bolin Ding, Liuyi Yao, Yaliang Li, Xiaokui Xiao, and Jingren Zhou. Performance-based pricing for federated learning via auction. *Proceedings of the VLDB Endowment*, 17(6):1269–1282, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648169.

Diao:2024:OIO

[3640] Yiqun Diao, Yutong Yang, Qinbin Li, Bingsheng He, and Mian Lu. OEBench: Investigating open environment challenges in real-world relational data streams. *Proceedings of the VLDB Endowment*, 17(6):1283–1296, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648170.

Xie:2024:IMV

[3641] Jiadong Xie, Zehua Chen, Deming Chu, Fan Zhang, Xuemin Lin, and Zhihong Tian. Influence maximization via vertex countering. *Proceedings of the VLDB Endowment*, 17(6):1297–1309, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648171.

Wang:2024:ODA

[3642] Tingting Wang, Shixun Huang, Zhifeng Bao, J. Shane Culpepper, Volkan Dedeoglu, and Reza Arablouei. Optimizing data acquisition to enhance machine learning performance. *Proceedings of the VLDB Endowment*, 17(6):1310–1323, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648172.

Chen:2024:MSC

[3643] Xin Chen, Jieming Shi, You Peng, Wenqing Lin, Sibo Wang, and Wenjie Zhang. Minimum strongly connected subgraph collection in dynamic graphs. *Proceedings of the VLDB Endowment*, 17(6):1324–1336, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648173.

Zhu:2024:FDF

[3644] Junhao Zhu, Yuren Mao, Lu Chen, Congcong Ge, Ziheng Wei, and Yunjun Gao. FusionQuery: On-demand fusion queries over multi-source heterogeneous data. *Proceedings of the VLDB Endowment*, 17(6):1337–1349, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648174.

Justen:2024:PAN

[3645] David Justen, Daniel Ritter, Campbell Fraser, Andrew Lamb, Allison Lee, Thomas Bodner, Mhd Yamen Haddad, Steffen Zeuch, Volker Markl, and Matthias Boehm. POLAR: Adaptive and non-invasive join order selection via plans of least resistance. *Proceedings of the VLDB Endowment*, 17(6):1350–1363, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648175.

Li:2024:DAG

[3646] Zhiyuan Li, Xun Jian, Yue Wang, Yingxia Shao, and Lei Chen. DAHA: Accelerating GNN training with data and hardware aware execution planning. *Proceedings of the VLDB Endowment*, 17(6):1364–1376, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648176.

Lu:2024:FSB

[3647] Ziyi Lu, Qiang Cao, Hong Jiang, Yuxing Chen, Jie Yao, and Anqun Pan. FluidKV: Seamlessly bridging the gap between indexing performance and memory-footprint on ultra-fast storage. *Proceedings of the VLDB Endowment*, 17(6):1377–1390, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648177.

Shah:2024:HDC

[3648] Vraj Shah, Thomas Parashos, and Arun Kumar. How do categorical duplicates affect ML? A new benchmark and empirical analyses. *Proceedings of the VLDB Endowment*, 17(6): 1391–1404, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648178.

Cui:2024:CUF

[3649] Pengjie Cui, Haotian Liu, Bo Tang, and Ye Yuan. CGgraph: an ultra-fast graph processing system on modern commodity CPU–GPU co-processor. *Proceedings of the VLDB Endowment*, 17(6): 1405–1417, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648179.

Chen:2024:FCD

[3650] Xinyu Chen, Jiannan Tian, Ian Beaver, Cynthia Freeman, Yan Yan, Jianguo Wang, and Dingwen Tao. FCBench: Cross-domain benchmarking of lossless compression for floating-point data. *Proceedings of the VLDB Endowment*, 17(6):1418–1431, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648180.

Hurst:2024:PFA

[3651] Aaron Hurst, Daniel E. Lucani, and Qi Zhang. PairwiseHist: Fast, accurate and space-efficient approximate query processing with data compression. *Proceedings of the VLDB Endowment*, 17(6):1432–1445, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648181.

Zhang:2024:MAD

[3652] Huayi Zhang, Binwei Yan, Lei Cao, Samuel Madden, and Elke Rundensteiner. MetaStore: Analyzing deep learning meta-data at scale. *Proceedings of the VLDB Endowment*, 17(6): 1446–1459, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648182.

Lv:2024:RES

[3653] Yangming Lv, Kai Zhang, Ziming Wang, Xiaodong Zhang, Rubao Lee, Zhenying He, Yinan Jing, and X. Sean Wang. RTScan: Efficient scan with ray tracing cores. *Proceedings of the VLDB Endowment*, 17(6):1460–1472, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648183.

Huang:2024:FRM

[3654] Kezhao Huang, Haitian Jiang, Minjie Wang, Guangxuan Xiao, David Wipf, Xiang Song, Quan Gan, Zengfeng Huang, Jidong Zhai, and Zheng Zhang. FreshGNN: Reducing memory access via stable historical embeddings for graph neural network training. *Proceedings of the VLDB Endowment*, 17 (6):1473–1486, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648184.

Zheng:2024:SBA

[3655] Ying Zheng and Kian-Lee Tan. Sorting on byte-addressable storage: The resurgence of tree structure. *Proceedings of the VLDB Endowment*, 17(6): 1487–1500, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648185.

Chatziliadis:2024:EPD

[3656] Xenofon Chatziliadis, Eleni Tzirita Zacharatou, Alphan Eracar, Steffen Zeuch, and Volker Markl. Efficient placement of decomposable aggregation functions for stream processing over large geo-distributed topologies. *Proceedings of the VLDB Endowment*, 17(6):1501–1514, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648186.

Hou:2024:AEB

[3657] Jiamin Hou, Zhanhao Zhao, Zhouyu Wang, Wei Lu, Guodong Jin, Dong Wen, and Xiaoyong Du. AeonG: an efficient built-in temporal support in graph databases. *Proceedings of the VLDB Endowment*, 17(6): 1515–1527, February 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3648160.3648187.

Yu:2024:RIT

[3658] Tao Yu, Zhaonian Zou, Weihua Sun, and Yu Yan. Refactoring index tuning process with benefit estimation. *Proceedings of the VLDB Endowment*, 17(7):1528–1541, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654622.

Li:2024:LSY

[3659] Xunkai Li, Meihao Liao, Zhengyu Wu, Daohan Su, Wentao Zhang, Rong-Hua Li, and Guoren Wang. LightDiC: a simple yet effective approach for large-scale digraph representation learning. *Proceedings of the VLDB Endowment*, 17(7):1542–1551, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654623.

Kuang:2024:EDD

[3660] Shulei Kuang, Honghui Yang, Zijing Tan, and Shuai Ma. Efficient differential dependency discovery. *Proceedings of the VLDB Endowment*, 17 (7):1552–1564, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654624.

Lehmann:2024:YLQ

[3661] Claude Lehmann, Pavel Sulimov, and Kurt Stockinger. Is your learned query optimizer behaving as you expect? A machine learning perspective. *Proceedings of the VLDB Endowment*, 17(7):1565–1577, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654625.

Zhang:2024:MCK

[3662] Zhuoxing Zhang and Sebastian Link. Mixed covers of keys and functional dependencies for maintaining the integrity of data under updates. *Proceedings of the VLDB Endowment*, 17 (7):1578–1590, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654626.

Deng:2024:OSH

[3663] Yuhao Deng, Yu Wang, Lei Cao, Lianpeng Qiao, Yuping Wang, Jingzhe Xu, Yizhou Yan, and Samuel Madden. Outlier summarization via human interpretable rules. *Proceedings of the VLDB Endowment*, 17(7):1591–1604, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654627.

Yuan:2024:NEE

[3664] Haitao Yuan, Gao Cong, and Guoliang Li. Nuhuo: an effective estimation model for traffic speed histogram imputation on a road network. *Proceedings of the VLDB Endowment*, 17(7):1605–1617, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654628.

Ravikumar:2024:IPP

[3665] Deepak Ravikumar, Alex Yeo, Yiwen Zhu, Aditya Lakra, Harsha Nagulapalli, Santhosh Ravindran, Steve Suh, Niharika Dutta, Andrew Fogarty, Yoonjae Park, Sumeet Khushalani, Arijit Tarafdar, Kunal Parekh, and Subru Krishnan. Intelligent pooling: Proactive resource provisioning in large-scale cloud service. *Proceedings of the VLDB Endowment*, 17(7):1618–1627, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654629.

Ye:2024:EES

[3666] Yutong Ye, Xiang Lian, and Mingsong Chen. Efficient exact subgraph matching via GNN-based path dominance embedding. *Proceedings of the VLDB Endowment*, 17(7):1628–1641, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654630.

Wang:2024:LDH

[3667] Zijia Wang, Haoran Liu, Chen Lin, Zhifeng Bao, Guoliang Li, and Tianqing Wang. Leveraging dynamic and heterogeneous workload knowledge to boost the performance of index advisors. *Proceedings of the VLDB Endowment*, 17(7):1642–1654, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654631.

Ertl:2024:UPM

[3668] Otmar Ertl. UltraLogLog: a practical and more space-efficient alternative to HyperLogLog for approximate distinct counting. *Proceedings of the VLDB Endowment*, 17(7):1655–1668, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654632.

Gong:2024:RTI

[3669] Zengyang Gong, Yuxiang Zeng, and Lei Chen. Real-time insertion operator for shared mobility on time-dependent road networks. *Proceedings of the VLDB Endowment*, 17(7):1669–1682, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654633.

Fan:2024:XTM

[3670] Dayi Fan, Rubao Lee, and Xiaodong Zhang. X-TED: Massive parallelization of tree edit distance. *Proceedings of the VLDB Endowment*, 17(7):1683–1696, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654634.

Shin:2024:CES

[3671] Wonseok Shin, Siwoo Song, Kunsoo Park, and Wook-Shin Han. Cardinality estimation of subgraph matching: a filtering-sampling approach. *Proceedings of the VLDB Endowment*, 17(7):1697–1709, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654635.

Liang:2024:ERS

[3672] Qi Liang, Dian Ouyang, Fan Zhang, Jianye Yang, Xuemin Lin, and Zhihong Tian. Efficient regular simple path queries under transitive restricted expressions. *Proceedings of the VLDB Endowment*, 17(7):1710–1722, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654636.

Zhong:2024:MSD

[3673] Shuhan Zhong, Sizhe Song, Weipeng Zhuo, Guanyao Li, Yang Liu, and S.-H. Gary Chan. A multi-scale decomposition MLP-mixer for time series analysis. *Proceedings of the VLDB Endowment*, 17(7):1723–1736, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654637.

Xia:2024:PSS

[3674] Haocheng Xia, Xiang Li, Junyuan Pang, Jinfei Liu, Kui Ren, and Li Xiong. P-Shapley: Shapley values on probabilistic classifiers. *Proceedings of the VLDB Endowment*, 17(7):1737–1750, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654638.

He:2024:OVS

[3675] Wenjia He, Ibrahim Sabek, Yuze Lou, and Michael Cafarella. Optimizing video selection LIMIT queries with commonsense knowledge. *Proceedings of the VLDB Endowment*, 17(7):1751–1764, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654639.

Huo:2024:ZZT

[3676] Nan Huo, Reynold Cheng, Ben Kao, Wentao Ning, Nur Al Hasan Haldar, Xiaodong Li, Jinyang Li, Mohammad Matin Najafi, Tian Li, and Ge Qu. ZeroEA: a zero-training entity alignment framework via pre-trained language model. *Proceedings of the VLDB Endowment*, 17(7):1765–1774, March 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654640.

Liu:2024:EGR

[3677] Xueli Liu, Bowen Dong, Wenzhi Fu, Nannan Wu, Xin Wang, and Wenjun Wang. Extending graph rules with oracles. *Proceedings of the VLDB Endowment*, 17(7):1775–1787, March

2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3654621.3654641.

Mei:2024:FME

[3678] Junyi Mei, Shixuan Sun, Chao Li, Cheng Xu, Cheng Chen, Yibo Liu, Jing Wang, Cheng Zhao, Xiaofeng Hou, Minyi Guo, Bingsheng He, and Xiaoliang Cong. FlowWalker: a memory-efficient and high-performance GPU-based dynamic graph random walk framework. *Proceedings of the VLDB Endowment*, 17(8):1788–1801, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659438.

Kim:2024:ASK

[3679] Minsu Kim, Jinwoo Hwang, Guseul Heo, Seiyeon Cho, Divya Mahajan, and Jongse Park. Accelerating string-key learned index structures via memoization-based incremental training. *Proceedings of the VLDB Endowment*, 17(8):1802–1815, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659439.

Liao:2024:TBC

[3680] Xuankun Liao, Qing Liu, Xin Huang, and Jianliang Xu. Truss-based community search over streaming directed graphs. *Proceedings of the VLDB Endowment*, 17(8):1816–1829, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659440.

Salazar-Diaz:2024:IDM

[3681] Ricardo Salazar-Díaz, Boris Glavic, and Tilmann Rabl. InferDB: In-database machine learning inference using indexes. *Proceedings of the VLDB Endowment*, 17(8):1830–1842, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659441.

Wei:2024:AAM

[3682] Fei Wei, Ergute Bao, Xiaokui Xiao, Yin Yang, and Bolin Ding. AAA: an adaptive mechanism for locally differentially private mean estimation. *Proceedings of the VLDB Endowment*, 17(8):1843–1855, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659442.

Deng:2024:AMP

[3683] Yangshen Deng, Muxi Yan, and Bo Tang. Accelerating Merkle Patricia trie with GPU. *Proceedings of the VLDB Endowment*, 17(8):1856–1869, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659443.

Wang:2024:PAS

[3684] Shaowei Wang, Yun Peng, Jin Li, Zikai Wen, Zhipeng Li, Shiyu Yu, Di Wang, and Wei Yang. Privacy amplification via shuffling: Unified, simplified, and tightened. *Proceedings of the VLDB Endowment*, 17(8):1870–1883, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659444.

Song:2024:DMR

[3685] Jiansen Song, Wensheng Dou, Yu Gao, Ziyu Cui, Yingying Zheng, Dong Wang, Wei Wang, Jun Wei, and Tao Huang. Detecting metadata-related logic bugs in database systems via raw database construction. *Proceedings of the VLDB Endowment*, 17 (8):1884–1897, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659445`.

Wu:2024:ZHD

[3686] Biao Wu, Qiang Huang, and Anthony K. H. Tung. From zero to hero: Detecting leaked data through synthetic data injection and model querying. *Proceedings of the VLDB Endowment*, 17(8):1898–1910, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659446`.

Chen:2024:OOD

[3687] Guanduo Chen, Zhenying He, Meng Li, and Siqiang Luo. Oasis: an optimal disjoint segmented learned range filter. *Proceedings of the VLDB Endowment*, 17(8):1911–1924, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659447`.

Deng:2024:LBD

[3688] Yuhao Deng, Chengliang Chai, Lei Cao, Qin Yuan, Siyuan Chen, Yanrui Yu, Zhaoze Sun, Junyi Wang, Jiajun Li, Ziqi Cao, Kaisen Jin, Chi Zhang, Yuqing Jiang, Yuanfang Zhang, Yuping Wang, Ye Yuan, Guoren Wang, and Nan Tang. LakeBench: a benchmark for discovering joinable and unionable tables in data lakes. *Proceedings of the VLDB Endowment*, 17(8):1925–1938, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659448`.

Lao:2024:GMR

[3689] Jiale Lao, Yibo Wang, Yufei Li, Jianping Wang, Yunjia Zhang, Zhiyuan Cheng, Wanghu Chen, Mingjie Tang, and Jianguo Wang. GPTuner: a manual-reading database tuning system via GPT-guided Bayesian optimization. *Proceedings of the VLDB Endowment*, 17(8):1939–1952, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659449`.

Ermshaus:2024:RCS

[3690] Arik Ermshaus, Patrick Schäfer, and Ulf Leser. Raising the ClaSS of streaming time series segmentation. *Proceedings of the VLDB Endowment*, 17 (8):1953–1966, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659450`.

Li:2024:FLS

[3691] Qiyan Li and Jeffrey Xu Yu. Fast local subgraph counting. *Proceedings of the VLDB Endowment*, 17(8):1967–1980, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659451`.

Zhang:2024:RER

[3692] Yunjia Zhang, Jordan Henkel, Avrilia Floratou, Joyce Cahoon, Shaleen Deep, and Jignesh M. Patel. ReAcTable: Enhancing ReAct for table question answering. *Proceedings of the VLDB Endowment*, 17(8):1981–1994, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659452`.

Ai:2024:NRS

[3693] Xin Ai, Qiange Wang, Chunyu Cao, Yanfeng Zhang, Chaoyi Chen, Hao Yuan, Yu Gu, and Ge Yu. NeutronOrch: Rethinking sample-based GNN training under CPU–GPU heterogeneous environments. *Proceedings of the VLDB Endowment*, 17 (8):1995–2008, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659453`.

Liu:2024:RED

[3694] Zifan Liu, Shaleen Deep, Anna Fariha, Fotis Psallidas, Ashish Tiwari, and Avrilia Floratou. Rapidash: Efficient detection of constraint violations. *Proceedings of the VLDB Endowment*, 17(8):2009–2021, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659454`.

Mohapatra:2024:DPD

[3695] Shubhankar Mohapatra, Jianqiao Zong, Florian Kerschbaum, and Xi He. Differentially private data generation with missing data. *Proceedings of the VLDB Endowment*, 17(8):2022–2035, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659455`.

Su:2024:EYA

[3696] Zhaoyuan Su, Ammar Ahmed, Zirui Wang, Ali Anwar, and Yue Cheng. Everything you always wanted to know about storage compressibility of pre-trained ML models but were afraid to ask. *Proceedings of the VLDB Endowment*, 17(8):2036–2049, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659456`.

Li:2024:FFF

[3697] Haoyang Li, Shimin Di, Calvin Hong Yi Li, Lei Chen, and Xiaofang Zhou. Fight fire with fire: Towards robust graph neural networks on dynamic graphs via actively defense. *Proceedings of the VLDB Endowment*, 17(8):2050–2063, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659457`.

Zirak:2024:SLB

[3698] Farzaneh Zirak, Farhana Choudhury, and Renata Borovica-Gajic. SeLeP: Learning based semantic prefetching for exploratory database workloads. *Proceedings of the VLDB Endowment*, 17(8):2064–2076, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659458`.

Chen:2024:CEF

[3699] Yiwei Chen, Kaiyu Li, Guoliang Li, and Yong Wang. Contributions estimation in federated learning: a comprehensive experimental evaluation. *Proceedings of the VLDB Endowment*, 17(8):2077–2090, April 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3659437.3659459`.

Maroulis:2024:VAT

[3700] Stavros Maroulis, Vassilis Stamatopoulos, George Papastefanatos, and Manolis Terrovitis. Visualization-aware time series min-max caching with error bound guarantees. *Proceedings of the*

VLDB Endowment, 17(8):2091–2103, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659460.

Kayali:2024:CFM

[3701] Moe Kayali, Anton Lykov, Ilias Fountalis, Nikolaos Vasiloglou, Dan Olteanu, and Dan Suciu. Chorus: Foundation models for unified data discovery and exploration. *Proceedings of the VLDB Endowment*, 17 (8):2104–2114, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659461.

Leis:2024:CND

[3702] Viktor Leis and Christian Dietrich. Cloud-native database systems and unikernels: Reimagining OS abstractions for modern hardware. *Proceedings of the VLDB Endowment*, 17 (8):2115–2122, April 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3659437.3659462.

Xiong:2024:CEC

[3703] Haoran Xiong, Hang Zhang, Zeyu Wang, Zhenying He, Peng Wang, and X. Sean Wang. CIVET: Exploring compact index for variable-length subsequence matching on time series. *Proceedings of the VLDB Endowment*, 17 (9):2123–2135, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665845.

Kittivorawong:2024:SGV

[3704] Chanwut Kittivorawong, Yongming Ge, Yousef Helal, and Alvin Cheung. Spatialyze: a geospatial video analytics system with spatial-aware optimizations. *Proceedings of the VLDB Endowment*, 17(9):2136–2148, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665846.

Yin:2024:OMS

[3705] Hanyan Yin, Dongxie Wen, Jiajun Li, Zhewei Wei, Xiao Zhang, Zengfeng Huang, and Feifei Li. Optimal matrix sketching over sliding windows. *Proceedings of the VLDB Endowment*, 17 (9):2149–2161, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665847.

Baca:2024:WFE

[3706] Radim Baca. Window function expression: Let the self-join enter. *Proceedings of the VLDB Endowment*, 17 (9):2162–2174, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665848.

Kakaraparthy:2024:SSD

[3707] Aarati Kakaraparthy and Jignesh M. Patel. SplitDF: Splitting dataframes for memory-efficient data analysis. *Proceedings of the VLDB Endowment*, 17 (9):2175–2184, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665849.

Daliri:2024:SMI

[3708] Majid Daliri, Juliana Freire, Christopher Musco, Aécio Santos, and Haoxiang Zhang. Sampling methods for inner product sketching. *Proceedings of the VLDB Endowment*, 17(9):2185–2197, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665850.

Hu:2024:DDI

[3709] Han Hu, Jiye Qiu, Hongzhi Wang, Bin Liang, and Songling Zou. DIDS: Double indices and double summarizations for fast similarity search. *Proceedings of the VLDB Endowment*, 17 (9):2198–2211, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665851.

Xu:2024:IGC

[3710] Qian Xu, Juan Yang, Feng Zhang, Zheng Chen, Jiawei Guan, Kang Chen, Ju Fan, Youren Shen, Ke Yang, Yu Zhang, and Xiaoyong Du. Improving graph compression for efficient resource-constrained graph analytics. *Proceedings of the VLDB Endowment*, 17(9):2212–2226, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665852.

Wang:2024:EUC

[3711] Jianwei Wang, Kai Wang, Xuemin Lin, Wenjie Zhang, and Ying Zhang. Efficient unsupervised community search with pre-trained graph transformer. *Proceedings of the VLDB Endowment*, 17(9):2227–2240, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665853.

Wei:2024:LLS

[3712] Jiuqi Wei, Botao Peng, Xiaodong Lee, and Themis Palpanas. DET-LSH: a locality-sensitive hashing scheme with dynamic encoding tree for approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 17 (9):2241–2254, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665854.

Liu:2024:BEA

[3713] Haoyu Liu and Siqiang Luo. BIRD: Efficient approximation of bidirectional hidden personalized PageRank. *Proceedings of the VLDB Endowment*, 17 (9):2255–2268, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665855.

Yu:2024:GGP

[3714] Zihao Yu, Ningyi Liao, and Siqiang Luo. GENTI: GPU-powered walk-based subgraph extraction for scalable representation learning on dynamic graphs. *Proceedings of the VLDB Endowment*, 17(9):2269–2278, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665856.

Feuer:2024:ANF

[3715] Benjamin Feuer, Yurong Liu, Chinmay Hegde, and Juliana Freire. ArcheType: a novel framework for open-source column type annotation using large language models. *Proceedings of the VLDB Endowment*, 17(9):2279–2292, May 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3665844.3665857.

Chang:2024:TSM

[3716] Yanchuan Chang, Egemen Tanin, Gao Cong, Christian S. Jensen, and Jianzhong Qi. Trajectory similarity measurement: an efficiency perspective. *Proceedings of the VLDB Endowment*, 17(9):2293–2306, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665858`.

Wheatman:2024:BUF

[3717] Brian Wheatman, Xiaojun Dong, Zheqi Shen, Laxman Dhulipala, Jakub Lacki, Prashant Pandey, and Helen Xu. BYO: a unified framework for benchmarking large-scale graph containers. *Proceedings of the VLDB Endowment*, 17(9):2307–2320, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665859`.

Zhu:2024:SVD

[3718] Yizheng Zhu, Yuncheng Wu, Zhaojing Luo, Beng Chin Ooi, and Xiaokui Xiao. Secure and verifiable data collaboration with low-cost zero-knowledge proofs. *Proceedings of the VLDB Endowment*, 17(9):2321–2334, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665860`.

Nagda:2024:RDD

[3719] Heena Nagda, Shubhendra Pal Singhal, Mohammad Javad Amiri, and Boon Thau Loo. Rashnu: Data-dependent order-fairness. *Proceedings of the VLDB Endowment*, 17(9):2335–2348, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665861`.

Huang:2024:SBA

[3720] Yuchuan Huang and Mohamed F. Mokbel. Sparcle: Boosting the accuracy of data cleaning systems through spatial awareness. *Proceedings of the VLDB Endowment*, 17(9):2349–2362, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665862`.

Qiu:2024:TTC

[3721] Xiangfei Qiu, Jilin Hu, Lekui Zhou, Xingjian Wu, Junyang Du, Buang Zhang, Chenjuan Guo, Aoying Zhou, Christian S. Jensen, Zhenli Sheng, and Bin Yang. TFB: Towards comprehensive and fair benchmarking of time series forecasting methods. *Proceedings of the VLDB Endowment*, 17(9):2363–2377, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665863`.

Liu:2024:FFG

[3722] Chengjun Liu, Zhuo Peng, Weiguo Zheng, and Lei Zou. FSM: a fine-grained splitting and merging framework for dual-balanced graph partition. *Proceedings of the VLDB Endowment*, 17(9):2378–2391, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665864`.

Marchesin:2024:ERE

[3723] Stefano Marchesin and Gianmaria Silvello. Efficient and reliable estimation of knowledge graph accuracy. *Proceedings of the VLDB Endowment*, 17(9):2392–2403, May 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3665844.3665865`.

Zhou:2024:BID

[3724] Wei Zhou, Chen Lin, Xuanhe Zhou, and Guoliang Li. Breaking it down: an in-depth study of index advisors. *Proceedings of the VLDB Endowment*, 17(10):2405–2418, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675035.

Deng:2024:AMC

[3725] Wen Deng, Weiguo Zheng, and Hong Cheng. Accelerating maximal clique enumeration via graph reduction. *Proceedings of the VLDB Endowment*, 17(10):2419–2431, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675036.

Bai:2024:PPB

[3726] Jiyang Bai and Peixiang Zhao. Poligras: Policy-based graph summarization. *Proceedings of the VLDB Endowment*, 17(10):2432–2444, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675037.

Zheng:2024:SSW

[3727] Leqian Zheng, Lei Xu, Cong Wang, Sheng Wang, Yuke Hu, Zhan Qin, Feifei Li, and Kui Ren. SWAT: a system-wide approach to tunable leakage mitigation in encrypted data stores. *Proceedings of the VLDB Endowment*, 17(10):2445–2458, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675038.

Wang:2024:TTI

[3728] Kai Wang, Yuwei Xu, and Siqiang Luo. TIGER: Training inductive graph neural network for large-scale knowledge graph reasoning. *Proceedings of the VLDB Endowment*, 17(10):2459–2472, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675039.

Zhang:2024:ISW

[3729] Chao Zhang, Angela Bonifati, and M. Tamer Özsu. Incremental sliding window connectivity over streaming graphs. *Proceedings of the VLDB Endowment*, 17(10):2473–2486, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675040.

Cai:2024:CEC

[3730] Qingpeng Cai, Kaiping Zheng, H. V. Jagadish, Beng Chin Ooi, and James Yip. CohortNet: Empowering cohort discovery for interpretable healthcare analytics. *Proceedings of the VLDB Endowment*, 17(10):2487–2500, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675041.

Wang:2024:EIM

[3731] Jinghao Wang, Yanping Wu, Xiaoyang Wang, Ying Zhang, Lu Qin, Wenjie Zhang, and Xuemin Lin. Efficient influence minimization via node blocking. *Proceedings of the VLDB Endowment*, 17(10):2501–2513, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675042.

Zhou:2024:DBD

[3732] Xuanhe Zhou, Guoliang Li, Zhaoyan Sun, Zhiyuan Liu, Weize Chen, Jianming Wu, Jiesi Liu, Ruohang Feng, and Guoyang Zeng. D-Bot: Database diagnosis system using large language models. *Proceedings of the VLDB Endowment*, 17(10):2514–2527, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675043.

Qiao:2024:BFS

[3733] Yiming Qiao, Yihan Gao, and Huanchen Zhang. Blitzcrank: Fast semantic compression for in-memory online transaction processing. *Proceedings of the VLDB Endowment*, 17 (10):2528–2540, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675044.

Chen:2024:SSS

[3734] Zhihao Chen, Tianji Yang, Yixiao Zheng, Zhao Zhang, Cheqing Jin, and Aoying Zhou. Spectrum: Speedy and strictly-deterministic smart contract transactions for blockchain ledgers. *Proceedings of the VLDB Endowment*, 17(10):2541–2554, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675045.

Zhang:2024:FCG

[3735] Zihao Zhang, Huiqi Hu, Xuan Zhou, Yaofeng Tu, Weining Qian, and Aoying Zhou. Fast commitment for geo-distributed transactions via decentralized co-coordinators. *Proceedings of the VLDB Endowment*, 17(10):2555–2567, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675046.

Lerner:2024:CRS

[3736] Alberto Lerner and Gustavo Alonso. CXL and the return of scale-up database engines. *Proceedings of the VLDB Endowment*, 17(10):2568–2575, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675047.

Fang:2024:IAC

[3737] Shuheng Fang, Kangfei Zhao, Yu Rong, Zhixun Li, and Jeffrey Xu Yu. Inductive attributed community search: To learn communities across graphs. *Proceedings of the VLDB Endowment*, 17 (10):2576–2589, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675048.

Yuan:2024:ELC

[3738] Long Yuan, Xia Li, Zi Chen, Xuemin Lin, Xiang Zhao, and Wenjie Zhang. I/O efficient label-constrained reachability queries in large graphs. *Proceedings of the VLDB Endowment*, 17 (10):2590–2602, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675049.

Lu:2024:DSR

[3739] Baotong Lu, Kaisong Huang, Chieh-Jan Mike Liang, Tianzheng Wang, and Eric Lo. DEX: Scalable range indexing on disaggregated memory. *Proceedings of the VLDB Endowment*, 17 (10):2603–2616, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675050.

Ni:2024:ADR

[3740] Wei Ni, Xiaoye Miao, Xiangyu Zhao, Yangyang Wu, Shuwei Liang, and Jianwei Yin. Automatic data repair: Are we ready to deploy? *Proceedings of the VLDB Endowment*, 17(10):2617–2630, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675051.

Chang:2024:BHM

[3741] Chaokun Chang, Eric Lo, and Chunxiao Ye. Biathlon: Harnessing model resilience for accelerating ML inference pipelines. *Proceedings of the VLDB Endowment*, 17(10):2631–2640, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675052.

Zeng:2024:DSD

[3742] Yuanyuan Zeng, Chenhao Ma, and Yixiang Fang. Distributed shortest distance labeling on large-scale graphs. *Proceedings of the VLDB Endowment*, 17(10):2641–2653, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675053.

Luo:2024:EPD

[3743] Wensheng Luo, Yixiang Fang, Chunxu Lin, and Yingli Zhou. Efficient parallel D-core decomposition at scale. *Proceedings of the VLDB Endowment*, 17(10):2654–2667, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675054.

Pellegrina:2024:EDS

[3744] Leonardo Pellegrina and Fabio Vandin. Efficient discovery of significant patterns with few-shot resampling. *Proceedings of the VLDB Endowment*, 17(10):2668–2680, June 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3675034.3675055.

Chen:2024:RBP

[3745] Qixu Chen and Raymond Chi-Wing Wong. Robust best point selection under unreliable user feedback. *Proceedings of the VLDB Endowment*, 17(11):2681–2693, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681955.

Cheng:2024:TOT

[3746] Audrey Cheng, Aaron Kabcenell, Jason Chan, Xiao Shi, Peter Bailis, Natacha Crooks, and Ion Stoica. Towards optimal transaction scheduling. *Proceedings of the VLDB Endowment*, 17(11):2694–2707, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681956.

Campos:2024:QDE

[3747] David Campos, Bin Yang, Tung Kieu, Miao Zhang, Chenjuan Guo, and Christian S. Jensen. QCore: Data-efficient, on-device continual calibration for quantized models. *Proceedings of the VLDB Endowment*, 17(11):2708–2721, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681957.

Zhang:2024:EAP

[3748] Yalong Zhang, Rong-Hua Li, Qi Zhang, Hongchao Qin, Lu Qin, and Guoren

Wang. Efficient algorithms for pseudoarboricity computation in large static and dynamic graphs. *Proceedings of the VLDB Endowment*, 17 (11):2722–2734, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681958.

Chen:2024:RPB

[3749] Meng Chen, Kai Zhang, Zhenying He, Yinan Jing, and X. Sean Wang. RoarGraph: a projected bipartite graph for efficient cross-modal approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 17(11):2735–2749, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681959.

Fan:2024:CSL

[3750] Ju Fan, Zihui Gu, Songyue Zhang, Yuxin Zhang, Zui Chen, Lei Cao, Guoliang Li, Samuel Madden, Xiaoyong Du, and Nan Tang. Combining small language models and large language models for zero-shot NL2SQL. *Proceedings of the VLDB Endowment*, 17(11):2750–2763, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681960.

Guliyev:2024:DGD

[3751] Rustam Guliyev, Aparajita Haldar, and Hakan Ferhatosmanoglu. D3-GNN: Dynamic distributed dataflow for streaming graph neural networks. *Proceedings of the VLDB Endowment*, 17(11):2764–2777, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681961.

Su:2024:DBO

[3752] Yunxiang Su, Shaoxu Song, Xiangdong Huang, Chen Wang, and Jianmin Wang. Distance-based outlier query optimization in Apache IoTDB. *Proceedings of the VLDB Endowment*, 17(11):2778–2790, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681962.

Yang:2024:TMF

[3753] Jianye Yang, Sheng Fang, Zhaoquan Gu, Ziyi Ma, Xuemin Lin, and Zhihong Tian. TC-Match: Fast time-constrained continuous subgraph matching. *Proceedings of the VLDB Endowment*, 17(11):2791–2804, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681963.

Wornow:2024:AEF

[3754] Michael Wornow, Avanika Narayan, Krista Opsahl-Ong, Quinn McIntyre, Nigam Shah, and Christopher Ré. Automating the enterprise with foundation models. *Proceedings of the VLDB Endowment*, 17(11):2805–2812, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681964.

Tian:2024:EIT

[3755] Anxin Tian, Alexander Zhou, Yue Wang, Xun Jian, and Lei Chen. Efficient index for temporal core queries over bipartite graphs. *Proceedings of the VLDB Endowment*, 17(11): 2813–2825, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681965.

Kato:2024:UFF

[3756] Fumiyuki Kato, Li Xiong, Shun Takagi, Yang Cao, and Masatoshi Yoshikawa. Uldp-FL: Federated learning with across-silo user-level differential privacy. *Proceedings of the VLDB Endowment*, 17(11):2826–2839, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681966.

Yang:2024:EFI

[3757] Junyong Yang, Ming Zhong, Yuanyuan Zhu, Tieyun Qian, Mengchi Liu, and Jeffrey Xu Yu. Evolution forest index: Towards optimal temporal k-core component search via time-topology isomorphic computation. *Proceedings of the VLDB Endowment*, 17 (11):2840–2853, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681967.

Ma:2024:EDP

[3758] Yuxin Ma, Ping Gong, Tianming Wu, Jiawei Yi, Chengru Yang, Cheng Li, Qirong Peng, Guiming Xie, Yongcheng Bao, Haifeng Liu, and Yinlong Xu. Eliminating data processing bottlenecks in GNN training over large graphs via two-level feature compression. *Proceedings of the VLDB Endowment*, 17(11):2854–2866, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681968.

Rumbaugh:2024:TSI

[3759] Douglas B. Rumbaugh, Dong Xie, and Zhuoyue Zhao. Towards systematic index dynamization. *Proceedings of the VLDB Endowment*, 17(11):2867–2879, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681969.

Treder-Tschechlov:2024:ECB

[3760] Dennis Treder-Tschechlov, Manuel Fritz, Holger Schwarz, and Bernhard Mitschang. Ensemble clustering based on meta-learning and hyperparameter optimization. *Proceedings of the VLDB Endowment*, 17(11):2880–2892, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681970.

Guo:2024:ESR

[3761] Chenjuan Guo, Ronghui Xu, Bin Yang, Ye Yuan, Tung Kieu, Yan Zhao, and Christian S. Jensen. Efficient stochastic routing in path-centric uncertain road networks. *Proceedings of the VLDB Endowment*, 17(11):2893–2905, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681971.

Bonifati:2024:TPG

[3762] Angela Bonifati, Filip Murlak, and Yann Ramusat. Transforming property graphs. *Proceedings of the VLDB Endowment*, 17(11):2906–2918, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681972.

Sun:2024:LLM

[3763] Yushi Sun, Hao Xin, Kai Sun, Yifan Ethan Xu, Xiao Yang, Xin Luna Dong, Nan Tang, and Lei Chen. Are large language models a good replacement of taxonomies? *Proceedings of the VLDB Endowment*, 17(11):2919–2932, July 2024. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3681954.3681973.

Zhang:2024:EAD

[3764] Yalong Zhang, Rong-Hua Li, Qi Zhang, Hongchao Qin, and Guoren Wang. Efficient algorithms for density decomposition on large static and dynamic graphs. *Proceedings of the VLDB Endowment*, 17(11):2933–2945, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681974.

Zhou:2024:EMM

[3765] Yingli Zhou, Yixiang Fang, Chenhao Ma, Tianci Hou, and Xin Huang. Efficient maximal Motif-clique enumeration over large heterogeneous information networks. *Proceedings of the VLDB Endowment*, 17(11):2946–2959, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681975.

Sheng:2024:OCR

[3766] Zeang Sheng, Wentao Zhang, Yangyu Tao, and Bin Cui. OUTRE: an OUT-of-Core De-REdundancy GNN training framework for massive graphs within a single machine. *Proceedings of the VLDB Endowment*, 17(11):2960–2973, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681976.

Fang:2024:RSA

[3767] Chenguang Fang, Zijie Chen, Shaoxu Song, Xiangdong Huang, Chen Wang, and Jianmin Wang. On reducing space amplification with multi-column compaction in Apache IoTDB. *Proceedings of the VLDB Endowment*, 17 (11):2974–2986, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681977.

Schmidl:2024:AUH

[3768] Sebastian Schmidl, Felix Naumann, and Thorsten Papenbrock. AutoTSAD: Unsupervised holistic anomaly detection for time series data. *Proceedings of the VLDB Endowment*, 17 (11):2987–3002, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681978.

Chen:2024:EWB

[3769] Zheng Chen, Feng Zhang, Yang Chen, Xiaokun Fang, Guanyu Feng, Xiaowei Zhu, Wenguang Chen, and Xiaoyong Du. Enabling window-based monotonic graph analytics with reusable transitional results for pattern-consistent queries. *Proceedings of the VLDB Endowment*, 17(11):3003–3016, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681979.

Ramos:2024:WAS

[3770] Maria Ramos, João Azevedo, Kyle Kingsbury, José Pereira, Tânia Esteves, Ricardo Macedo, and João Paulo. When amnesia strikes: Understanding and reproducing data loss bugs with fault injection. *Proceedings of the VLDB Endowment*, 17 (11):3017–3030, July 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3681954.3681980.

Wang:2024:PTA

[3771] Leixia Wang, Qingqing Ye, Haibo Hu, and Xiaofeng Meng. PriPL-Tree: Accurate range query for arbitrary distribution under local differential privacy. *Proceedings of the VLDB Endowment*, 17(11):3031–3044, July 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3681954.3681981`.

Sun:2024:WWS

[3772] Yu Sun, Jingyu Zhu, Xiao Xu, Xian Xu, Yuyao Sun, Shaoxu Song, Xiang Li, and Xiaojie Yuan. Win-Win: On simultaneous clustering and imputing over incomplete data. *Proceedings of the VLDB Endowment*, 17 (11):3045–3057, July 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3681954.3681982`.

Takagi:2024:HDP

[3773] Shun Takagi, Li Xiong, Fumiyuki Kato, Yang Cao, and Masatoshi Yoshikawa. HRNet: Differentially private hierarchical and multi-resolution network for human mobility data synthesization. *Proceedings of the VLDB Endowment*, 17(11):3058–3071, July 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3681954.3681983`.

Dong:2024:EMI

[3774] Sijie Dong, Qitong Wang, Soror Sahri, Themis Palpanas, and Divesh Srivastava. Efficiently mitigating the impact of data drift on machine learning pipelines. *Proceedings of the VLDB Endowment*, 17(11):3072–3081, July 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3681954.3681984`.

Wang:2024:PEA

[3775] Libin Wang and Raymond Chi-Wing Wong. PCSP: Efficiently answering label-constrained shortest path queries in road networks. *Proceedings of the VLDB Endowment*, 17(11):3082–3094, July 2024. CODEN ???? ISSN 2150-8097.

Fejza:2024:EER

[3776] Amela Fejza, Pierre Genevès, and Nabil Layaïda. Efficient enumeration of recursive plans in transformation-based query optimizers. *Proceedings of the VLDB Endowment*, 17(11):3095–3108, July 2024. CODEN ???? ISSN 2150-8097.

Yan:2024:ERA

[3777] Mengyi Yan, Wenfei Fan, Yaoshu Wang, and Min Xie. Enriching relations with additional attributes for ER. *Proceedings of the VLDB Endowment*, 17(11):3109–3123, July 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:EAS

[3778] Haibo Wang. Enhancing accuracy for super spreader identification in high-speed data streams. *Proceedings of the VLDB Endowment*, 17(11):3124–3137, July 2024. CODEN ???? ISSN 2150-8097.

Seeman:2024:PAQ

[3779] Jeremy Seeman, William Sexton, David Pujol, and Ashwin Machanavajjhala. Privately answering queries on skewed data via per-record differential privacy. *Proceedings of the VLDB Endowment*, 17(11):3138–3150, July 2024. CODEN ???? ISSN 2150-8097.

Al-Sayeh:2024:AAS

[3780] Hani Al-Sayeh, Muhammad Attahir Jibril, and Kai-Uwe Sattler. Agile-Ant: Self-managing distributed cache management for cost optimization of big data applications. *Proceedings of the VLDB Endowment*, 17(11):3151–3164, July 2024. CODEN ???? ISSN 2150-8097.

Alevizos:2024:CER

[3781] Elias Alevizos, Alexander Artikis, and Georgios Paliouras. Complex event recognition with symbolic register transducers. *Proceedings of the VLDB Endowment*, 17(11):3165–3177, July 2024. CODEN ???? ISSN 2150-8097.

Xie:2024:HHA

[3782] Yupeng Xie, Yuyu Luo, Guoliang Li, and Nan Tang. HAIChart: Human and AI paired visualization system. *Proceedings of the VLDB Endowment*, 17 (11):3178–3191, July 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:SBF

[3783] Yun Wang, Chrysanthi Kosyfaki, Sihem Amer-Yahia, and Reynold Cheng. A sampling-based framework for hypothesis testing on large attributed graphs. *Proceedings of the VLDB Endowment*, 17(11):3192–3200, July 2024. CODEN ???? ISSN 2150-8097.

Li:2024:LPA

[3784] Qinbin Li, Junyuan Hong, Chulin Xie, Jeffrey Tan, Rachel Xin, Junyi Hou, Xavier Yin, Zhun Wang, Dan Hendrycks, Zhangyang Wang, Bo Li, Bingsheng He, and Dawn Song. LLM-PBE: Assessing data privacy in large language models. *Proceedings of the VLDB Endowment*, 17(11):3201–3214, July 2024. CODEN ???? ISSN 2150-8097.

Birler:2024:RJP

[3785] Altan Birler, Alfons Kemper, and Thomas Neumann. Robust join processing with diamond hardened joins. *Proceedings of the VLDB Endowment*, 17(11):3215–3228, July 2024. CODEN ???? ISSN 2150-8097.

Zuo:2024:DET

[3786] Rundong Zuo, Guozhong Li, Rui Cao, Byron Choi, Jianliang Xu, and Sourav S. Bhowmick. DARKER: Efficient transformer with data-driven attention mechanism for time series. *Proceedings of the VLDB Endowment*, 17 (11):3229–3242, July 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:EMF

[3787] Yanping Wu, Renjie Sun, Xiaoyang Wang, Dong Wen, Ying Zhang, Lu Qin, and Xuemin Lin. Efficient maximal frequent group enumeration in temporal bipartite graphs. *Proceedings of the VLDB Endowment*, 17(11):3243–3255, July 2024. CODEN ???? ISSN 2150-8097.

Chao:2024:OVQ

[3788] Daren Chao, Yueting Chen, Nick Koudas, and Xiaohui Yu. Optimizing video queries with declarative clues. *Proceedings of the VLDB Endowment*, 17(11):3256–3268, July 2024. CODEN ???? ISSN 2150-8097.

Behme:2024:FFA

[3789] Lennart Behme, Sainyam Galhotra, Kaustubh Beedkar, and Volker Markl. Fainder: a fast and accurate index for distribution-aware dataset search. *Proceedings of the VLDB Endowment*, 17 (11):3269–3282, July 2024. CODEN ???? ISSN 2150-8097.

Yuan:2024:NAN

[3790] Ye Yuan, Bo Tang, Tianfei Zhou, Zhiwei Zhang, and Jianbin Qin. nsDB: Architecting the next generation database by integrating neural and symbolic systems. *Proceedings of the VLDB Endowment*, 17(11):3283–3289, July 2024. CODEN ???? ISSN 2150-8097.

Schmidt:2024:TBO

[3791] Tobias Schmidt, Dominik Durner, Viktor Leis, and Thomas Neumann. Two birds with one stone: Designing a hybrid cloud storage engine for HTAP. *Proceedings of the VLDB Endowment*, 17(11):3290–3303, July 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:DDO

[3792] Qizhen Zhang, Philip A. Bernstein, Badrish Chandramouli, Jiasheng Hu, and Yiming Zheng. DDS: DPU-optimized disaggregated storage. *Proceedings of the VLDB Endowment*, 17 (11):3304–3317, July 2024. CODEN ???? ISSN 2150-8097.

Li:2024:DNL

[3793] Boyan Li, Yuyu Luo, Chengliang Chai, Guoliang Li, and Nan Tang. The dawn of natural language to SQL: Are we fully ready? *Proceedings of the VLDB Endowment*, 17(11):3318–3331, July 2024. CODEN ???? ISSN 2150-8097.

Si:2024:CES

[3794] Michelle Si and Jian Pei. Counterfactual explanation of Shapley value in data coalitions. *Proceedings of the VLDB Endowment*, 17(11):3332–3345, July 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:SDL

[3795] Yi Zhang, Peter Baile Chen, and Zachary G. Ives. Searching data lakes for nested and joined data. *Proceedings of the VLDB Endowment*, 17(11):3346–3359, July 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:EBC

[3796] Xinrui Wang, Yiran Wang, Xuemin Lin, Jeffrey Xu Yu, Hong Gao, Xiuzhen Cheng, and Dongxiao Yu. Efficient betweenness centrality computation over large heterogeneous information networks. *Proceedings of the VLDB Endowment*, 17(11):3360–3372, July 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:HAS

[3797] William Zhang, Wan Shen Lim, Matthew Butrovich, and Andrew Pavlo. The holon approach for simultaneously tuning multiple components in a self-driving database management system with machine learning via synthesized proto-actions. *Proceedings of the VLDB Endowment*, 17(11):3373–3387, July 2024. CODEN ???? ISSN 2150-8097.

Song:2024:DCA

[3798] Zhen Song, Yu Gu, Qing Sun, Tianyi Li, Yanfeng Zhang, Yushuai Li, Christian S. Jensen, and Ge Yu. DynaHB: a communication-avoiding asynchronous distributed framework with hybrid batches for dynamic GNN training. *Proceedings of the VLDB Endowment*, 17(11):3388–3401, July 2024. CODEN ???? ISSN 2150-8097.

Feng:2024:ESP

[3799] Qingshuai Feng, Junhua Zhang, Wenjie Zhang, Lu Qin, Ying Zhang, and Xuemin Lin. Efficient kNN search in public transportation networks. *Proceedings of the VLDB Endowment*, 17 (11):3402–3414, July 2024. CODEN ???? ISSN 2150-8097.

Yang:2024:LOL

[3800] Yifan Yang and Shimin Chen. LITS: an optimized learned index for strings. *Proceedings of the VLDB Endowment*, 17(11):3415–3427, July 2024. CODEN ???? ISSN 2150-8097.

Fogli:2024:OMC

[3801] Alessandro Fogli, Bo Zhao, Peter Pietzuch, Maximilian Bandle, and Jana Giceva. OLAP on modern chiplet-based processors. *Proceedings of the VLDB Endowment*, 17(11):3428–3441, July 2024. CODEN ???? ISSN 2150-8097.

Hao:2024:BTM

[3802] Xiangpeng Hao and Badrish Chandramouli. Bf-Tree: a modern read-write-optimized concurrent larger-than-memory range index. *Proceedings of the VLDB Endowment*, 17(11):3442–3455, July 2024. CODEN ???? ISSN 2150-8097.

Hansert:2024:PDS

[3803] Patrick Hansert and Sebastian Michel. Partition, don't sort! Compression boosters for cloud data ingestion pipelines. *Proceedings of the VLDB Endowment*, 17(11):3456–3469, July 2024. CODEN ???? ISSN 2150-8097.

Erfanian:2024:CFM

[3804] Mahdi Erfanian, H. V. Jagadish, and Abolfazl Asudeh. Chameleon: Foundation models for fairness-aware multi-modal data augmentation to enhance coverage of minorities. *Proceedings of the VLDB Endowment*, 17(11):3470–3483, July 2024. CODEN ???? ISSN 2150-8097.

Ding:2024:DRM

[3805] Xiaoou Ding, Yixing Lu, Hongzhi Wang, Chen Wang, Yida Liu, and Jianmin Wang. DAFDiscover: Robust mining algorithm for dynamic approximate functional dependencies on dirty data. *Proceedings of the VLDB Endowment*, 17(11):3484–3496, July 2024. CODEN ???? ISSN 2150-8097.

Mohr-Daurat:2024:HED

[3806] Hubert Mohr-Daurat, Georgios Theodorakis, and Holger Pirk. Hardware-efficient data imputation through DBMS extensibility. *Proceedings of the VLDB Endowment*, 17(11):3497–3510, July 2024. CODEN ???? ISSN 2150-8097.

Trummer:2024:GSD

[3807] Immanuel Trummer. Generating succinct descriptions of database schemata for cost-efficient prompting of large language models. *Proceedings of the VLDB Endowment*, 17(11):3511–3523, July 2024. CODEN ???? ISSN 2150-8097.

Srivastava:2024:SMA

[3808] Tapan Srivastava and Raul Castro Fernandez. Saving money for analytical workloads in the cloud. *Proceedings of the VLDB Endowment*, 17(11):3524–3537, July 2024. CODEN ???? ISSN 2150-8097.

Yun:2024:RBJ

[3809] Joohyung Yun, Byungchul Tak, and Wook-Shin Han. ReCG: Bottom-up JSON schema discovery using a repetitive cluster-and-generalize framework. *Proceedings of the VLDB Endowment*, 17(11):3538–3550, July 2024. CODEN ???? ISSN 2150-8097.

Mersy:2024:OCB

[3810] Gabriel Mersy, Zhuo Wang, Stavros Sintos, and Sanjay Krishnan. Optimizing collections of Bloom filters within a space budget. *Proceedings of the VLDB Endowment*, 17(11):3551–3564, July 2024. CODEN ???? ISSN 2150-8097.

Lyu:2024:SOA

[3811] Chenghao Lyu, Qi Fan, Philippe Guyard, and Yanlei Diao. A spark optimizer for adaptive, fine-grained parameter tuning. *Proceedings of the VLDB Endowment*, 17(11):3565–3579, July 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:TSC

[3812] Zuozhi Wang, Yicong Huang, Shengquan Ni, Avinash Kumar, Sadeem Alsudais, Xiaozhen Liu, Xinyuan Lin, Yunyan Ding, and Chen Li. Texera: a system for collaborative and interactive data analytics using workflows. *Proceedings of the VLDB Endowment*, 17(11):3580–3588, July 2024. CODEN ???? ISSN 2150-8097.

Ke:2024:EVS

[3813] Jin Ke, Zenon Zacouris, and Maribel Acosta. Efficient validation of SHACL shapes with reasoning. *Proceedings of the VLDB Endowment*, 17(11):3589–3601, July 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:QPQ

[3814] Shuxian Wang, Sicheng Pan, and Alvin Cheung. QED: a powerful query equivalence decider for SQL. *Proceedings of the VLDB Endowment*, 17(11):3602–3614, July 2024. CODEN ???? ISSN 2150-8097.

Kesarwani:2024:IAQ

[3815] Manish Kesarwani and Jayant R. Haritsa. Index advisors on quantum platforms. *Proceedings of the VLDB Endowment*, 17(11):3615–3628, July 2024. CODEN ???? ISSN 2150-8097.

Yu:2024:BCU

[3816] Geoffrey X. Yu, Ziniu Wu, Ferdi Kossmann, Tianyu Li, Markos Markakis, Amadou Ngom, Samuel Madden, and Tim Kraska. Blueprinting the cloud: Unifying and automatically optimizing cloud data infrastructures with BRAD. *Proceedings of the VLDB Endowment*, 17(11):3629–3643, July 2024. CODEN ???? ISSN 2150-8097.

Dayan:2024:AFI

[3817] Niv Dayan, Ioana-Oriana Bercea, and Rasmus Pagh. Aleph Filter: To infinity in constant time. *Proceedings of the VLDB Endowment*, 17(11):3644–3656, July 2024. CODEN ???? ISSN 2150-8097.

Chen:2024:RRT

[3818] Yuhang Chen, Jiaxin Jiang, Shixuan Sun, Bingsheng He, and Min Chen. RUSH: Real-time burst subgraph detection in dynamic graphs. *Proceedings of the VLDB Endowment*, 17(11):3657–3665, July 2024. CODEN ???? ISSN 2150-8097.

Liang:2024:BSD

[3819] Zhicheng Liang, Yu Yang, Xiangyu Ke, Xiaokui Xiao, and Yunjun Gao. A benchmark study of deep-RL methods for maximum coverage problems over graphs. *Proceedings of the VLDB Endowment*, 17(11):3666–3679, July 2024. CODEN ???? ISSN 2150-8097.

Lim:2024:HGA

[3820] Wan Shen Lim, Lin Ma, William Zhang, Matthew Butrovich, Samuel Arch, and Andrew Pavlo. Hit the gym: Accelerating query execution to efficiently bootstrap behavior models for self-driving database management systems. *Proceedings of the VLDB Endowment*, 17(11):3680–3693, July 2024. CODEN ???? ISSN 2150-8097.

vanRenen:2024:WTE

[3821] Alexander van Renen, Dominik Horn, Pascal Pfeil, Kapil Vaidya, Wenjian Dong, Murali Narayanaswamy, Zhengchun Liu, Gaurav Saxena, Andreas Kipf, and Tim Kraska. Why TPC is not enough: an analysis of the Amazon Redshift Fleet. *Proceedings of the VLDB Endowment*, 17(11):3694–3706, July 2024. CODEN ???? ISSN 2150-8097.

Chang:2024:ECC

[3822] Lijun Chang, Rashmika Gamage, and Jeffrey Xu Yu. Efficient k-clique count estimation with accuracy guarantee. *Proceedings of the VLDB Endowment*, 17(11):3707–3719, July 2024. CODEN ???? ISSN 2150-8097.

Eldeeb:2024:CAO

[3823] Tamer Eldeeb, Sebastian Burckhardt, Reuben Bond, Asaf Cidon, Junfeng Yang, and Philip A. Bernstein. Cloud actor-oriented database transactions in orleans. *Proceedings of the VLDB Endowment*, 17(12):3720–3730, August 2024. CODEN ???? ISSN 2150-8097.

Schulze:2024:CLF

[3824] Robert Schulze, Tom Schreiber, Ilya Yatsishin, Ryadh Dahimene, and Alexey Milovidov. ClickHouse — lightning fast analytics for everyone. *Proceedings of the VLDB Endowment*, 17 (12):3731–3744, August 2024. CODEN ???? ISSN 2150-8097.

Han:2024:PRW

[3825] Fusheng Han, Hao Liu, Bin Chen, Debin Jia, Jianfeng Zhou, Xuwang Teng, Chuanhui Yang, Huafeng Xi, Wei Tian, Shuning Tao, Sen Wang, Quanqing Xu, and Zhenkun Yang. PALF: Replicated write-ahead logging for distributed databases. *Proceedings of the VLDB Endowment*, 17(12):3745–3758, August 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:TRE

[3826] Yixin Wu, Xiuqi Huang, Zhongjia Wei, Hang Cheng, Chaohui Xin, Zuzhi Chen, Binbin Chen, Yufei Wu, Hao Wang, Tieying Zhang, Rui Shi, Xiaofeng Gao, Yuming Liang, Pengwei Zhao, and Guihai Chen. Towards resource efficiency: Practical insights into large-scale spark workloads at

ByteDance. *Proceedings of the VLDB Endowment*, 17(12):3759–3771, August 2024. CODEN ???? ISSN 2150-8097.

Chen:2024:SVI

[3827] Cheng Chen, Chenzhe Jin, Yunan Zhang, Sasha Podolsky, Chun Wu, Szu-Po Wang, Eric Hanson, Zhou Sun, Robert Walzer, and Jianguo Wang. SingleStore-V: an integrated vector database system in SingleStore. *Proceedings of the VLDB Endowment*, 17 (12):3772–3785, August 2024. CODEN ???? ISSN 2150-8097.

Li:2024:GCN

[3828] Guoliang Li, Wengang Tian, Jinyu Zhang, Ronen Grosman, Zongchao Liu, and Sihao Li. GaussDB: a cloud-native multi-primary database with compute-memory-storage disaggregation. *Proceedings of the VLDB Endowment*, 17 (12):3786–3798, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:LBP

[3829] Hao Wang, Jiaxin Ou, Ming Zhao, Sheng Qiu, Yizheng Jiao, Yi Wang, Qizhong Mao, Zhengyu Yang, Yang Liu, Jianshun Zhang, Jianyang Hu, Jingwei Zhang, Jinrui Liu, Jiaqiang Chen, Yong Shen, Lixun Cao, Heng Zhang, Hongde Li, Ming Li, Yue Ma, Lei Zhang, Jian Liu, Guanghui Zhang, Fei Liu, and Jianjun Chen. LavaStore: ByteDance's purpose-built, high-performance, cost-effective local storage engine for cloud services. *Proceedings of the VLDB Endowment*, 17(12): 3799–3812, August 2024. CODEN ???? ISSN 2150-8097.

Paduroiu:2024:MSP

[3830] Andrei Paduroiu, Sungheun Wi, Yan Yan, Roni Burd, Ruhollah Farchtchi, and Giovanni Matteo Fumarola. Membrane — safe and performant data access controls in Apache Spark in the presence of imperative code. *Proceedings of the VLDB Endowment*, 17(12): 3813–3826, August 2024. CODEN ???? ISSN 2150-8097.

Ahn:2024:ECM

[3831] Minseon Ahn, Thomas Willhalm, Norman May, Donghun Lee, Suprasad Mutalik Desai, Daniel Booss, Jungmin Kim, Navneet Singh, Daniel Ritter, and Oliver Rebholz. An examination of CXL memory use cases for in-memory database management systems using SAP HANA. *Proceedings of the VLDB Endowment*, 17(12):3827–3840, August 2024. CODEN ???? ISSN 2150-8097.

Yi:2024:KSK

[3832] Peng Yi, Lei Liang, Da Zhang, Yong Chen, Jinye Zhu, Xiangyu Liu, Kun Tang, Jialin Chen, Hao Lin, Leijie Qiu, and Jun Zhou. KGFabric: a scalable knowledge graph warehouse for enterprise data interconnection. *Proceedings of the VLDB Endowment*, 17(12):3841–3854, August 2024. CODEN ???? ISSN 2150-8097.

Bianchi:2024:DTU

[3833] Alexander Bianchi, Andrew Chai, Vincent Corvinelli, Parke Godfrey, Jarek Szlichta, and Calisto Zuzarte. Db2une: Tuning under pressure via deep learning. *Proceedings of the VLDB Endowment*, 17(12):3855–3868, August 2024. CODEN ???? ISSN 2150-8097.

Chen:2024:TTD

[3834] Yuxing Chen, Anqun Pan, Hailin Lei, Anda Ye, Shuo Han, Yan Tang, Wei Lu, Yunpeng Chai, Feng Zhang, and Xiaoyong Du. TDSQL: Tencent distributed database system. *Proceedings of the VLDB Endowment*, 17(12):3869–3882, August 2024. CODEN ???? ISSN 2150-8097.

Januschowski:2024:FFS

[3835] Tim Januschowski, Yuyang Wang, Jan Gasthaus, Syama Rangapuram, Caner Türkmen, Jasper Zschiegner, Lorenzo Stella, Michael Bohlke-Schneider, Danielle Maddix, Konstantinos Benidis, Alexander Alexandrov, Christos Faloutsos, and Sebastian Schelter. A flexible forecasting stack. *Proceedings of the VLDB Endowment*, 17(12):3883–3892, August 2024. CODEN ???? ISSN 2150-8097.

Tong:2024:GHP

[3836] Bing Tong, Yan Zhou, Chen Zhang, Jianheng Tang, Jing Tang, Leihong Yang, Qiye Li, Manwu Lin, Zhongxin Bao, Jia Li, and Lei Chen. Galaxybase: a high performance native distributed graph database for HTAP. *Proceedings of the VLDB Endowment*, 17(12):3893–3905, August 2024. CODEN ???? ISSN 2150-8097.

Yang:2024:SEP

[3837] Xinying Yang, Cong Yue, Wenhui Zhang, Yang Liu, Beng Chin Ooi, and Jianjun Chen. SecuDB: an in-enclave privacy-preserving and tamper-resistant relational database. *Proceedings of the VLDB Endowment*, 17(12): 3906–3919, August 2024. CODEN ???? ISSN 2150-8097.

Zhu:2024:ATA

[3838] Jun-Peng Zhu, Peng Cai, Kai Xu, Li Li, Yishen Sun, Shuai Zhou, Haihuang Su, Liu Tang, and Qi Liu. AutoTQA: Towards autonomous tabular question answering through multi-agent large language models. *Proceedings of the VLDB Endowment*, 17(12):3920–3933, August 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:RTM

[3839] Xinchun Zhang, Aqsa Kashaf, Yihan Zou, Wei Zhang, Weibo Liao, Haoxiang Song, Jintao Ye, Yakun Li, Rui Shi, Yong Tian, Wei Feng, Binbin Chen, Zuzhi Chen, Tieying Zhang, and Yongping Tang. ResLake: Towards minimum job latency and balanced resource utilization in geo-distributed job scheduling. *Proceedings of the VLDB Endowment*, 17(12):3934–3946, August 2024. CODEN ???? ISSN 2150-8097.

Xue:2024:ARQ

[3840] Maryann Xue, Yingyi Bu, Abhishek Somani, Wenchen Fan, Ziqi Liu, Steven Chen, Herman van Hovell, Bart Samwel, Mostafa Mokhtar, RK Korlapati, Andy Lam, Yunxiao Ma, Vuk Ercegovac, Jiexing Li, Alexander Behm, Yuanjian Li, Xiao Li, Sriram Krishnamurthy, Amit Shukla, Michalis Petropoulos, Sameer Paranjpye, Reynold Xin, and Matei Zaharia. Adaptive and robust query execution for lakehouses at scale. *Proceedings of the VLDB Endowment*, 17(12):3947–3959, August 2024. CODEN ???? ISSN 2150-8097.

Davisson:2024:TMD

[3841] Ed Davisson, Tilo Dickopp, David Gay, Eric Karasuda, Ram Kesavan, and Vadim Yushprakh. Transparent migration from datastore to firestore. *Proceedings of the VLDB Endowment*, 17 (12):3960–3972, August 2024. CODEN ???? ISSN 2150-8097.

Hang:2024:CPE

[3842] Jinquan Hang, Zhiqing Hong, Xinyue Feng, Guang Wang, Dongjiang Cao, Jiayang Qiao, Haotian Wang, and Desheng Zhang. Complex-Path: Effective and efficient node ranking with paths in billion-scale heterogeneous graphs. *Proceedings of the VLDB Endowment*, 17(12):3973–3986, August 2024. CODEN ???? ISSN 2150-8097.

Fang:2024:SSS

[3843] Wenjing Fang, Shunde Cao, Guojin Hua, Junming Ma, Yongqiang Yu, Qunshan Huang, Jun Feng, Jin Tan, Xiaopeng Zan, Pu Duan, Yang Yang, Li Wang, Ke Zhang, and Lei Wang. SecretFlow-SCQL: a secure collaborative query platform. *Proceedings of the VLDB Endowment*, 17(12):3987–4000, August 2024. CODEN ???? ISSN 2150-8097.

Fan:2024:TMD

[3844] Hua Fan, Dachao Fu, Xu Wang, Jiachi Zhang, Chaoji Zuo, Zhengyi Wu, Miao Zhang, Kang Yuan, Xizi Ni, Guocheng Huo, Wenchao Zhou, Feifei Li, and Jingren Zhou. Towards millions of database transmission services in the cloud. *Proceedings of the VLDB Endowment*, 17(12):4001–4013, August 2024. CODEN ???? ISSN 2150-8097.

Xiong:2024:LSM

[3845] Tao Xiong and Yong Wang. Large-scale metric computation in online controlled experiment platform. *Proceedings of the VLDB Endowment*, 17(12): 4014–4024, August 2024. CODEN ???? ISSN 2150-8097.

Lei:2024:XSC

[3846] Hongyu Lei, Chunhua Li, Ke Zhou, Jianping Zhu, Kezhou Yan, Fen Xiao, Ming Xie, Jiang Wang, and Shiyu Di. X-Stor: a cloud-native NoSQL database service with multi-model support. *Proceedings of the VLDB Endowment*, 17(12):4025–4037, August 2024. CODEN ???? ISSN 2150-8097.

Barnhart:2024:RMA

[3847] Bradley Barnhart, Marc Brooker, Daniil Chinenkov, Tony Hooper, Jihoun Im, Prakash Chandra Jha, Tim Kraska, Ashok Kurakula, Alexey Kuznetsov, Grant McAlister, Arjun Muthukrishnan, Aravinthan Narayanan, Douglas Terry, Bhuvan Urgaonkar, and Jiaming Yan. Resource management in Aurora serverless. *Proceedings of the VLDB Endowment*, 17(12):4038–4050, August 2024. CODEN ???? ISSN 2150-8097.

Shute:2024:SPW

[3848] Jeff Shute, Shannon Bales, Matthew Brown, Jean-Daniel Browne, Brandon Dolphin, Romit Kudtarkar, Andrey Litvinov, Jingchi Ma, John Morcos, Michael Shen, David Wilhite, Xi Wu, and Lulan Yu. SQL has problems. we can fix them: Pipe syntax in SQL. *Proceedings of the VLDB Endowment*, 17 (12):4051–4063, August 2024. CODEN ???? ISSN 2150-8097.

Zhao:2024:ATI

[3849] Xin Zhao, Jialin Qiao, Xiangdong Huang, Chen Wang, Shaoxu Song, and

Jianmin Wang. Apache TsFile: an IoT-native time series file format. *Proceedings of the VLDB Endowment*, 17(12): 4064–4076, August 2024. CODEN ???? ISSN 2150-8097.

Shankhdhar:2024:PHB

[3850] Pranjal Shankhdhar, Feilong Liu, Jay Narale, James Sun, Rebecca Schlussel, and Lyublena Antova. Presto's history-based query optimizer. *Proceedings of the VLDB Endowment*, 17(12):4077–4089, August 2024. CODEN ???? ISSN 2150-8097.

Zou:2024:OCF

[3851] Ding Zou, Wei Lu, Zhibo Zhu, Xingyu Lu, Jun Zhou, Xiaojin Wang, Kangyu Liu, Kefan Wang, Renen Sun, and Haiqing Wang. OptScaler: a collaborative framework for robust autoscaling in the cloud. *Proceedings of the VLDB Endowment*, 17(12):4090–4103, August 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:DAA

[3852] Joshua Wu, Dixin Tang, Nithin Chalapathi, Tristan Chambers, Julie Ciccolini, Cheryl Phillips, Lisa Pickoff-White, and Aditya Parameswaran. Dealing with acronyms, abbreviations, and typos in real-world entity matching. *Proceedings of the VLDB Endowment*, 17 (12):4104–4116, August 2024. CODEN ???? ISSN 2150-8097.

Ouyang:2024:LUU

[3853] Qianyu Ouyang, Chunhui Shen, Wenlong Yang, Peng Yu, Qiang Xiao, Jianhui Lei, Yadong Chen, Qilu Zhong, Xiang Wang, Yong Lin, Qingyi Meng, Zhicheng Ji, Wei Meng, Cen Zheng, Sheng Wang, Dan Pei, Wei Zhang, Feifei Li, and Jingren Zhou. Lindorm-UWC: an ultra-wide-column database for Internet of vehicles. *Proceedings of the VLDB Endowment*, 17(12):4117–4129, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:DRR

[3854] Qinlong Wang, Tingfeng Lan, Yinghao Tang, Bo Sang, Ziling Huang, Yiheng Du, Haitao Zhang, Jian Sha, Hui Lu, Yuanchun Zhou, Ke Zhang, and Mingjie Tang. DLRover-RM: Resource optimization for deep recommendation models training in the cloud. *Proceedings of the VLDB Endowment*, 17(12): 4130–4144, August 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:DPS

[3855] Bing Zhang, Vadym Doroshenko, Peter Kairouz, Thomas Steinke, Abhradeep Thakurta, Ziyin Ma, Eidan Cohen, Himani Apte, and Jodi Spacek. Differentially private stream processing at scale. *Proceedings of the VLDB Endowment*, 17(12):4145–4158, August 2024. CODEN ???? ISSN 2150-8097.

Okolnychyi:2024:PSR

[3856] Anton Okolnychyi, Chao Sun, Kazuyuki Tanimura, Russell Spitzer, Ryan Blue, Szehon Ho, Yufei Gu, Vishwanath Lakkundi, and DB Tsai. Petabyte-scale row-level operations in data lakehouses. *Proceedings of the VLDB Endowment*, 17(12):4159–4172, August 2024. CODEN ???? ISSN 2150-8097.

Shankar:2024:SSD

[3857] Shreya Shankar, Haotian Li, Parth Asawa, Madelon Hulsebos, Yiming Lin, J. D. Zamfirescu-Pereira, Harrison Chase, Will Fu-Hinthorn, Aditya G.

Parameswaran, and Eugene Wu. spade: Synthesizing data quality assertions for large language model pipelines. *Proceedings of the VLDB Endowment*, 17 (12):4173–4186, August 2024. CODEN ???? ISSN 2150-8097.

Sakka:2024:SYE

[3858] Laith Sakka, Pedro Pedreira, Orri Erling, Masha Basmanova, Kevin Wilfong, Wei He, Xiaoxuan Meng, Krishna Pai, and Bikramjeet Vig. Simple (yet efficient) function authoring for vectorized engines. *Proceedings of the VLDB Endowment*, 17(12):4187–4199, August 2024. CODEN ???? ISSN 2150-8097.

Ahmed:2024:GSD

[3859] Rafi Ahmed, Krishna Kantikiran Pasupuleti, Sriram Tirupattur, Lei Sheng, Hong Su, and Mohamed Ziauddin. Grouping, subsumption, and disjunctive join optimizations in oracle. *Proceedings of the VLDB Endowment*, 17 (12):4200–4212, August 2024. CODEN ???? ISSN 2150-8097.

Li:2024:LDM

[3860] Guoliang Li, Xuanhe Zhou, and Xinyang Zhao. LLM for data management. *Proceedings of the VLDB Endowment*, 17(12):4213–4216, August 2024. CODEN ???? ISSN 2150-8097.

Xu:2024:NDD

[3861] Quanqing Xu, Chuanhui Yang, and Aoying Zhou. Native distributed databases: Problems, challenges and opportunities. *Proceedings of the VLDB Endowment*, 17(12):4217–4220, August 2024. CODEN ???? ISSN 2150-8097.

Fischer:2024:RTR

[3862] Tim Fischer, Denis Hirn, and Gökhan Kul. A reproducible tutorial on reproducibility in database systems research. *Proceedings of the VLDB Endowment*, 17(12):4221–4224, August 2024. CODEN ???? ISSN 2150-8097.

Roy:2024:FPQ

[3863] Senjuti Basu Roy, Baruch Schieber, and Nimrod Talmon. Fairness in preference queries: Social choice theories meet data management. *Proceedings of the VLDB Endowment*, 17(12):4225–4228, August 2024. CODEN ???? ISSN 2150-8097.

Liu:2024:TSA

[3864] Qinghua Liu, Paul Boniol, Themis Palpanas, and John Paparrizos. Time-series anomaly detection: Overview and new trends. *Proceedings of the VLDB Endowment*, 17(12):4229–4232, August 2024. CODEN ???? ISSN 2150-8097.

Nawab:2024:CDM

[3865] Faisal Nawab and Mohammad Sadoghi. Consensus in data management: With use cases in edge-cloud and blockchain systems. *Proceedings of the VLDB Endowment*, 17(12):4233–4236, August 2024. CODEN ???? ISSN 2150-8097.

Shen:2024:ETG

[3866] Yanyan Shen, Lei Chen, Jingzhi Fang, Xin Zhang, Shihong Gao, and Hongbo Yin. Efficient training of graph neural networks on large graphs. *Proceedings of the VLDB Endowment*, 17(12):4237–4240, August 2024. CODEN ???? ISSN 2150-8097.

Carvalho:2024:WPH

[3867] Marcos N. L. Carvalho, Alkis Simitsis, Anna Queralt, and Oscar Romero. Workload placement on heterogeneous CPU-GPU systems. *Proceedings of the VLDB Endowment*, 17(12):4241–4244, August 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:SQO

[3868] Xin Zhang and Ahmed Eldawy. Spatial query optimization with learning. *Proceedings of the VLDB Endowment*, 17 (12):4245–4248, August 2024. CODEN ???? ISSN 2150-8097.

Pedreira:2024:CDM

[3869] Pedro Pedreira, Deepak Majeti, and Orri Erling. Composable data management: an execution overview. *Proceedings of the VLDB Endowment*, 17(12): 4249–4252, August 2024. CODEN ???? ISSN 2150-8097.

Jiang:2024:SRT

[3870] Jiaxin Jiang, Zhen Zhang, Bingqiao Luo, Bingsheng He, Min Chen, WeiYang Wang, and Jia Chen. Spade: a real-time fraud detection framework. *Proceedings of the VLDB Endowment*, 17(12):4253–4256, August 2024. CODEN ???? ISSN 2150-8097.

Shi:2024:DDS

[3871] Dingyuan Shi, Bingchen Song, Yuanyuan Zhang, Haolong Yang, and Ke Xu. A data-driven spatiotemporal simulator for reinforcement learning methods. *Proceedings of the VLDB Endowment*, 17(12):4257–4260, August 2024. CODEN ???? ISSN 2150-8097.

Qin:2024:BIP

[3872] Haoyun Qin, Chenyuan Wu, Mohammad Javad Amiri, Ryan Marcus, and Boon Thau Loo. BFTGym: an interactive playground for BFT protocols. *Proceedings of the VLDB Endowment*, 17(12):4261–4264, August 2024. CODEN ???? ISSN 2150-8097.

Bonifati:2024:DDT

[3873] Angela Bonifati, Yann Ramusat, Filip Murlak, Amela Fejza, and Rachid Echahed. DTGraph: Declarative transformations of property graphs. *Proceedings of the VLDB Endowment*, 17(12): 4265–4268, August 2024. CODEN ???? ISSN 2150-8097.

Kroth:2024:MAB

[3874] Brian Kroth, Sergiy Matusevych, Rana Alotaibi, Yiwen Zhu, Anja Gruenheid, and Yuanyuan Tian. MLOS in action: Bridging the gap between experimentation and auto-tuning in the cloud. *Proceedings of the VLDB Endowment*, 17 (12):4269–4272, August 2024. CODEN ???? ISSN 2150-8097.

Schelter:2024:SRC

[3875] Sebastian Schelter, Stefan Grafberger, and Maarten de Rijke. Snarcase — regain control over your predictions with low-latency machine unlearning. *Proceedings of the VLDB Endowment*, 17 (12):4273–4276, August 2024. CODEN ???? ISSN 2150-8097.

Sun:2024:DEN

[3876] Yiqun Sun, Qiang Huang, Yanhao Wang, and Anthony K. H. Tung. DiversiNews: Enriching news consumption with relevant yet diverse news articles retrieval. *Proceedings of the VLDB*

Endowment, 17(12):4277–4280, August 2024. CODEN ???? ISSN 2150-8097.

Light:2024:SED

[3877] Dean Light, Ahmad Aiashy, Mahmoud Diab, Daniel Nachmias, Stijn Vansummeren, and Benny Kimelfeld. SpannerLib: Embedding declarative information extraction in an imperative workflow. *Proceedings of the VLDB Endowment*, 17(12):4281–4284, August 2024. CODEN ???? ISSN 2150-8097.

Copul:2024:DTT

[3878] Roni Copul, Nave Frost, Tova Milo, and Kathy Razmadze. Demonstrating TabEE: Tabular embedding explanations. *Proceedings of the VLDB Endowment*, 17(12):4285–4288, August 2024. CODEN ???? ISSN 2150-8097.

Ji:2024:NDR

[3879] Daomin Ji, Hui Luo, Zhifeng Bao, and Shane Culpepper. Navigating data repositories: Utilizing line charts to discover relevant datasets. *Proceedings of the VLDB Endowment*, 17(12):4289–4292, August 2024. CODEN ???? ISSN 2150-8097.

Fan:2024:GAA

[3880] Wenfei Fan, Daji Li, Peiyu Liang, Shuhao Liu, Yaoshu Wang, Yiming Wang, Min Xie, and Runjie Zhang. Graph association analyses for early drug discovery. *Proceedings of the VLDB Endowment*, 17(12):4293–4296, August 2024. CODEN ???? ISSN 2150-8097.

Wei:2024:DME

[3881] Lindsey Linxi Wei, Chung Yik Edward Yeung, Hongjian Yu, Jingchuan Zhou, Dong He, and Magdalena Balazinska. Demonstration of MaskSearch: Efficiently querying image masks for machine learning workflows. *Proceedings of the VLDB Endowment*, 17(12):4297–4300, August 2024. CODEN ???? ISSN 2150-8097.

Halfpap:2024:LDM

[3882] Stefan Halfpap, Jan Kossmann, Rainer Schlosser, and Volker Markl. Looking deeply into the magic mirror: an interactive analysis of database index selection approaches. *Proceedings of the VLDB Endowment*, 17(12):4301–4304, August 2024. CODEN ???? ISSN 2150-8097.

Cho:2024:UAP

[3883] Whanhee Cho and Anna Fariha. Utopia: Automatic pivot table assistant. *Proceedings of the VLDB Endowment*, 17(12):4305–4308, August 2024. CODEN ???? ISSN 2150-8097.

Ang:2024:TIA

[3884] Yihao Ang, Yifan Bao, Qiang Huang, Anthony K. H. Tung, and Zhiyong Huang. TSGAssist: an interactive assistant harnessing LLMs and RAG for time series generation recommendations and benchmarking. *Proceedings of the VLDB Endowment*, 17(12):4309–4312, August 2024. CODEN ???? ISSN 2150-8097.

Lee:2024:DAD

[3885] Wonseok Lee, Jaehyun Ha, Wook-Shin Han, Changgyoo Park, Myung-gon Park, and Juhyeng Han. DoppelGanger++ in action: a database replay system with fast dependency graph generation. *Proceedings of the VLDB Endowment*, 17(12):4313–4316,

August 2024. CODEN ???? ISSN 2150-8097.

Lai:2024:LBS

[3886] Eugenie Lai, Yuze Lou, Brit Youngmann, and Michael Cafarella. LucidScript: Bottom-up standardization for data preparation. *Proceedings of the VLDB Endowment*, 17(12):4317–4320, August 2024. CODEN ???? ISSN 2150-8097.

Ghazal:2024:OSG

[3887] Ahmad Ghazal, Zhiyuan Liang, Sunny Bains, and Hanumath Maduri. OSSInsight: Scalable GitHub analysis. *Proceedings of the VLDB Endowment*, 17 (12):4321–4324, August 2024. CODEN ???? ISSN 2150-8097.

Gu:2024:IBB

[3888] Long Gu, Si Liu, Tiancheng Xing, Hengfeng Wei, Yuxing Chen, and David Basin. IsoVista: Black-Box checking database isolation guarantees. *Proceedings of the VLDB Endowment*, 17(12):4325–4328, August 2024. CODEN ???? ISSN 2150-8097.

Khayati:2024:IIE

[3889] Mourad Khayati, Quentin Nater, and Jacques Pasquier. ImputeVIS: an interactive evaluator to benchmark imputation techniques for time series data. *Proceedings of the VLDB Endowment*, 17(12):4329–4332, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:IMM

[3890] Mengzhao Wang, Haotian Wu, Xiangyu Ke, Yunjun Gao, Xiaoliang Xu, and Lu Chen. An interactive multi-modal query answering system with retrieval-augmented large language models. *Proceedings of the VLDB Endowment*, 17(12):4333–4336, August 2024. CODEN ???? ISSN 2150-8097.

Giannakouris:2024:DPL

[3891] Victor Giannakouris and Immanuel Trummer. DBG-PT: a large language model assisted query performance regression debugger. *Proceedings of the VLDB Endowment*, 17(12):4337–4340, August 2024. CODEN ???? ISSN 2150-8097.

Campbell:2024:RMR

[3892] Felix S. Campbell, Julia Stoyanovich, and Yuval Moskovitch. Rodeo: Making refinements for diverse top-K queries. *Proceedings of the VLDB Endowment*, 17(12):4341–4344, August 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:QDQ

[3893] Xin Zhang and Ahmed Eldawy. QPJVis Demo: Quality-boost progressive join query processing system. *Proceedings of the VLDB Endowment*, 17 (12):4345–4348, August 2024. CODEN ???? ISSN 2150-8097.

VanNostrand:2024:CEA

[3894] Peter M. VanNostrand, Dennis M. Hofmann, Lei Ma, Belisha Genin, Randy Huang, and Elke. A. Rundensteiner. Counterfactual explanation analytics: Empowering lay users to take action against consequential automated decisions. *Proceedings of the VLDB Endowment*, 17(12):4349–4352, August 2024. CODEN ???? ISSN 2150-8097.

Xu:2024:UUA

[3895] Zhenrong Xu, Pengfei Wang, Guoze Xue, Qitong Yan, Shenghao Gong, Yelan Jiang, Yuren Mao, Yunjun Gao, Shu Shen, Wei Zhang, Dan Luo, and Lu Chen. UniView: a unified autonomous materialized view management system for various databases. *Proceedings of the VLDB Endowment*, 17(12):4353–4356, August 2024. CODEN ???? ISSN 2150-8097.

Yao:2024:DTT

[3896] Yuanyuan Yao, Shenjia Dai, Yilin Li, Lu Chen, Dimeng Li, Yunjun Gao, and Tianyi Li. A demonstration of TENDS: Time series management system based on model selection. *Proceedings of the VLDB Endowment*, 17(12):4357–4360, August 2024. CODEN ???? ISSN 2150-8097.

Althaus:2024:SEE

[3897] Luca Althaus, Mourad Khayati, Abdelouahab Khelifati, Anton Dignös, Djellel Difallah, and Philippe Cudré-Mauroux. SEER: an end-to-end toolkit for benchmarking time series database systems in monitoring applications. *Proceedings of the VLDB Endowment*, 17(12):4361–4364, August 2024. CODEN ???? ISSN 2150-8097.

Xue:2024:DDG

[3898] Siqiao Xue, Danrui Qi, Caigao Jiang, Fangyin Cheng, Keting Chen, Zhiping Zhang, Hongyang Zhang, Ganglin Wei, Wang Zhao, Fan Zhou, Hong Yi, Shaodong Liu, Hongjun Yang, and Faqiang Chen. Demonstration of DB-GPT: Next generation data interaction system empowered by large language models. *Proceedings of the VLDB Endowment*, 17(12):4365–4368, August 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:DQS

[3899] Zheng Zhang, Zhuhan Shao, and Andrew Crotty. DeepSketch: a query sketching interface for deep time series similarity search. *Proceedings of the VLDB Endowment*, 17(12):4369–4372, August 2024. CODEN ???? ISSN 2150-8097.

Bao:2024:RCD

[3900] Zian Bao, Binbin Bie, Wenfei Fan, Daji Li, Mengyun Li, Kaiwen Lin, Wei Lin, Peijie Liu, Peng Liu, Zhicong Lv, Mingliang Ouyang, Chenyang Sun, Shuai Tang, Yaoshu Wang, Qiyuan Wei, Xiangqian Wu, Min Xie, Jing Zhang, Runxiao Zhao, Jie Zhu, and Yilin Zhu. Rock: Cleaning data with both ML and logic rules. *Proceedings of the VLDB Endowment*, 17(12):4373–4376, August 2024. CODEN ???? ISSN 2150-8097.

Ding:2024:CDC

[3901] Xiaoou Ding, Yichen Song, Hongzhi Wang, Donghua Yang, Chen Wang, and Jianmin Wang. Clean4TSDB: a data cleaning tool for time series databases. *Proceedings of the VLDB Endowment*, 17(12):4377–4380, August 2024. CODEN ???? ISSN 2150-8097.

Chai:2024:LEE

[3902] Chengliang Chai, Yuhao Deng, Yutong Zhan, Ziqi Cao, Yuanfang Zhang, Lei Cao, Yuping Wang, Zhiwei Zhang, Ye Yuan, Guoren Wang, and Nan Tang. LakeCompass: an end-to-end system for data maintenance, search and analysis in data lakes. *Proceedings of the VLDB Endowment*, 17(12):4381–4384, August 2024. CODEN ???? ISSN 2150-8097.

Yu:2024:DSG

[3903] Jianzhe Yu, Wei Dong, Juanru Fang, Dajun Sun, and Ke Yi. DOP-SQL: a general-purpose, high-utility, and extensible private SQL system. *Proceedings of the VLDB Endowment*, 17(12): 4385–4388, August 2024. CODEN ???? ISSN 2150-8097.

Mei:2024:CCA

[3904] Baolong Mei, Yafei Li, Wei Chen, Linshen Luan, Guanglei Zhu, Yuanyuan Jin, and Jianliang Xu. Catcher: a cache analysis system for top-k pub/sub service. *Proceedings of the VLDB Endowment*, 17(12):4389–4392, August 2024. CODEN ???? ISSN 2150-8097.

Vasileiadis:2024:ODT

[3905] Sotiris Vasileiadis, Matthew Paraskeva, George Savva, Andreas Efstathiou, Edson Ramiro Lucas Filho, Jianqiang Shen, Lun Yang, Kebo Fu, and Herodotos Herodotou. Optimizing distributed tiered data storage systems with DITIS. *Proceedings of the VLDB Endowment*, 17(12):4393–4396, August 2024. CODEN ???? ISSN 2150-8097.

Li:2024:VVQ

[3906] Zhaozhuo Li, Xin Wang, Meng Wang, Yajun Yang, Bohan Li, and Dong Han. VQFT: a visual query approach based on full-text search for knowledge graphs. *Proceedings of the VLDB Endowment*, 17(12):4397–4400, August 2024. CODEN ???? ISSN 2150-8097.

Zhu:2024:CCA

[3907] Zhen Zhu, Yibo Wang, Shouqing Yang, Lin Long, Runze Wu, Xiu Tang, Junbo Zhao, and Haobo Wang. CORAL: Collaborative automatic labeling system based on large language models. *Proceedings of the VLDB Endowment*, 17 (12):4401–4404, August 2024. CODEN ???? ISSN 2150-8097.

Ni:2024:CEC

[3908] Wangze Ni, Yiwei Zhao, Pengze Chen, Lei Chen, Peng Cheng, and Chen Jason Zhang. CMixing: an efficient coin mixing platform to enhance anonymity in cryptocurrency transactions. *Proceedings of the VLDB Endowment*, 17(12): 4405–4408, August 2024. CODEN ???? ISSN 2150-8097.

Robson:2024:CPL

[3909] Eliot W. Robson, Dhemath Reddy, and Abhishek K. Umrawal. CyNetDiff: a Python library for accelerated implementation of network diffusion models. *Proceedings of the VLDB Endowment*, 17(12):4409–4412, August 2024. CODEN ???? ISSN 2150-8097.

Fu:2024:EEL

[3910] Zhe Fu, Mo Sha, Yiran Li, Huorong Li, Yubing Ma, Sheng Wang, and Feifei Li. EncChain: Enhancing large language model applications with advanced privacy preservation techniques. *Proceedings of the VLDB Endowment*, 17(12): 4413–4416, August 2024. CODEN ???? ISSN 2150-8097.

Shahbazi:2024:FSR

[3911] Nima Shahbazi, Mahdi Erfanian, Abolfazl Asudeh, Fatemeh Nargesian, and Divesh Srivastava. FairEM360: a suite for responsible entity matching. *Proceedings of the VLDB Endowment*, 17 (12):4417–4420, August 2024. CODEN ???? ISSN 2150-8097.

Naeem:2024:RRB

[3912] Zan Ahmad Naeem, Mohammad Shahmeer Ahmad, Mohamed Eltabakh, Mourad Ouzzani, and Nan Tang. RetClean: Retrieval-based data cleaning using LLMs and data lakes. *Proceedings of the VLDB Endowment*, 17(12): 4421–4424, August 2024. CODEN ???? ISSN 2150-8097.

Solleza:2024:MFT

[3913] Franco Solleza, Shihang Li, William Sun, Richard Tang, Malte Schwarzkopf, Nesime Tatbul, Andrew Crotty, David Cohen, and Stan Zdonik. Mach: Firefighting time-critical issues in complex systems using high-frequency telemetry. *Proceedings of the VLDB Endowment*, 17(12):4425–4428, August 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:SDZ

[3914] Renzhi Wu, Pramod Chunduri, Dristi J Shah, Ashmitha Julius Aravind, Ali Payani, Xu Chu, Joy Arulraj, and Kexin Rong. SketchQL demonstration: Zero-shot video moment querying with sketches. *Proceedings of the VLDB Endowment*, 17(12):4429–4432, August 2024. CODEN ???? ISSN 2150-8097.

Zhu:2024:DIS

[3915] Yiding Zhu, Hongwei Zhang, Jiayao Zhang, Jinfei Liu, and Kui Ren. DataPrice: an interactive system for pricing datasets in data marketplaces. *Proceedings of the VLDB Endowment*, 17 (12):4433–4436, August 2024. CODEN ???? ISSN 2150-8097.

Zhao:2024:DVE

[3916] Pinhan Zhao, Yang He, Xinyu Wang, and Yuepeng Wang. Demonstration of the VeriEQL equivalence checker for complex SQL queries. *Proceedings of the VLDB Endowment*, 17(12):4437–4440, August 2024. CODEN ???? ISSN 2150-8097.

Zhu:2024:FSS

[3917] Zeqi Zhu, Zeheng Fan, Yuxiang Zeng, Yexuan Shi, Yi Xu, Mengmeng Zhou, and Jin Dong. FedSQ: a secure system for federated vector similarity queries. *Proceedings of the VLDB Endowment*, 17(12):4441–4444, August 2024. CODEN ???? ISSN 2150-8097.

Wei:2024:FPF

[3918] Shuyue Wei, Yuanyuan Zhang, Zimu Zhou, Tianlong Zhang, and Ke Xu. FedSM: a practical federated shared mobility system. *Proceedings of the VLDB Endowment*, 17(12):4445–4448, August 2024. CODEN ???? ISSN 2150-8097.

vanRenen:2024:DSD

[3919] Alexander van Renen, Mihail Stoian, and Andreas Kipf. DataLoom: Simplifying data loading with LLMs. *Proceedings of the VLDB Endowment*, 17 (12):4449–4452, August 2024. CODEN ???? ISSN 2150-8097.

Xu:2024:DVT

[3920] Jie Jeff Xu, Saahir Dhanani, Jorge Piazentin Ono, Wenbin He, Liu Ren, and Kexin Rong. Demonstration of VCR: a tabular data slicing approach to understanding object detection model performance. *Proceedings of the VLDB Endowment*, 17(12):4453–4456, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:MPA

[3921] Mengying Wang, Hanchao Ma, Sheng Guan, Yiyang Bian, Haolai Che, Abhishek Daundkar, Alp Sehirlioglu, and Yinghui Wu. ModsNet: Performance-aware top- k model search using exemplar datasets. *Proceedings of the VLDB Endowment*, 17(12):4457–4460, August 2024. CODEN ???? ISSN 2150-8097.

Jiang:2024:OWO

[3922] Linshan Jiang, Moming Duan, Bingsheng He, Yulin Sun, Peishen Yan, Yang Hua, and Tao Song. OFL-W3: a one-shot federated learning system on Web 3.0. *Proceedings of the VLDB Endowment*, 17(12):4461–4464, August 2024. CODEN ???? ISSN 2150-8097.

Gao:2024:SDD

[3923] Chang Gao, Tianlong Zhang, Yuxiang Zeng, Yi Xu, Shuyuan Li, and Yuanyuan Zhang. Swift: a data-driven flight planning system at scale. *Proceedings of the VLDB Endowment*, 17 (12):4465–4468, August 2024. CODEN ???? ISSN 2150-8097.

Abdelhafeez:2024:PGS

[3924] Laila Abdelhafeez, Andres Calderon-Romero, Amr Magdy, and Vassilis J. Tsotras. Pyneapple-G: Scalable spatial grouping queries. *Proceedings of the VLDB Endowment*, 17(12):4469–4472, August 2024. CODEN ???? ISSN 2150-8097.

Elyashiv:2024:PEU

[3925] Itay Elyashiv, Amir Gilad, Edna Isakov, Tal Tikochinsky, and Amit Somech. PD-Explain: a unified python-native framework for query explanations over DataFrames. *Proceedings of the VLDB Endowment*, 17(12):4473–4476, August 2024. CODEN ???? ISSN 2150-8097.

Guan:2024:HDS

[3926] Jiawei Guan, Feng Zhang, Yuxin Tang, Weitang Ye, and Xiaoyong Du. HocoPG: a database system with homomorphic compression for text processing. *Proceedings of the VLDB Endowment*, 17(12):4477–4480, August 2024. CODEN ???? ISSN 2150-8097.

Zhao:2024:CAI

[3927] Xinyang Zhao, Xuanhe Zhou, and Guoliang Li. Chat2Data: an interactive data analysis system with RAG, vector databases and LLMs. *Proceedings of the VLDB Endowment*, 17(12):4481–4484, August 2024. CODEN ???? ISSN 2150-8097.

Liu:2024:PSM

[3928] Shuhao Liu, Yang Liu, and Wenfei Fan. PrismX: a single-machine system for querying big graphs. *Proceedings of the VLDB Endowment*, 17(12):4485–4488, August 2024. CODEN ???? ISSN 2150-8097.

Liang:2024:TUC

[3929] Zhiyu Liang, Chen Liang, Zheng Liang, Hongzhi Wang, and Bo Zheng. TimeCSL: Unsupervised contrastive learning of general shapelets for explorable time series analysis. *Proceedings of the VLDB Endowment*, 17(12): 4489–4492, August 2024. CODEN ???? ISSN 2150-8097.

Zhou:2024:HHL

[3930] Xiangmin Zhou, Chengkun He, Xi Chen, and Yanchun Zhang. HSAP: a human-in-the-loop social media-based situation awareness platform. *Proceedings of the VLDB Endowment*, 17(12):4493–4496, August 2024. CODEN ???? ISSN 2150-8097.

Shen:2024:DMM

[3931] Yiqi Shen, Sijia Li, Miaodong Shen, Peng Cai, Weiyuan Xu, Kai Li, and Jinlong Cai. DB-MAGS: Multi-anomaly data generation system for transactional databases. *Proceedings of the VLDB Endowment*, 17(12):4497–4500, August 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:QGI

[3932] Peizhi Wu, Yi Zhang, Wang-Chiew Tan, and Zachary G. Ives. QuoteInspector: Gaining insight about social media discussions. *Proceedings of the VLDB Endowment*, 17(12):4501–4504, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:VDW

[3933] Jianguo Wang, Eric Hanson, Guoliang Li, Yannis Papakonstantinou, Harsha Simhadri, and Charles Xie. Vector databases: What's really new and what's next? (VLDB 2024 panel). *Proceedings of the VLDB Endowment*, 17 (12):4505–4506, August 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:HPS

[3934] Fusheng Wang, Rubao Lee, Dejun Teng, Xiaodong Zhang, and Joel Saltz. High-performance spatial data analytics: Systematic R&D for scale-out and scale-up solutions from the past to now. *Proceedings of the VLDB Endowment*, 17(12):4507–4520, August 2024. CODEN ???? ISSN 2150-8097.

Amer-Yahia:2024:IAD

[3935] Sihem Amer-Yahia. Intelligent agents for data exploration. *Proceedings of the VLDB Endowment*, 17(12):4521–4530, August 2024. CODEN ???? ISSN 2150-8097.

Kumar:2024:RDL

[3936] Arun Kumar. Reimagining deep learning systems through the lens of data systems. *Proceedings of the VLDB Endowment*, 17(12):4531–4535, August 2024. CODEN ???? ISSN 2150-8097.

Leis:2024:LHP

[3937] Viktor Leis. LeanStore: a high-performance storage engine for NVMe SSDs. *Proceedings of the VLDB Endowment*, 17(12):4536–4545, August 2024. CODEN ???? ISSN 2150-8097.

Madden:2024:DUQ

[3938] Samuel Madden, Michael Cafarella, Michael Franklin, and Tim Kraska. Databases unbound: Querying all of the world's bytes with AI. *Proceedings of the VLDB Endowment*, 17(12):4546–4554, August 2024. CODEN ???? ISSN 2150-8097.

Xiao:2024:SID

[3939] Xiaokui Xiao. Sharing information with differential privacy: a database perspective (VLDB 2024 keynote). *Proceedings of the VLDB Endowment*, 17(12):4555, August 2024. CODEN ???? ISSN 2150-8097.

Ozcan:2024:HMD

[3940] Fatma Ozcan. Harmonizing ML and databases: a symphony of data (VLDB 2024 keynote). *Proceedings of the VLDB Endowment*, 17(12):4556, August 2024. CODEN ???? ISSN 2150-8097.

Fruth:2024:CDL

[3941] Michael Fruth and Stefanie Scherzinger. The case for DBMS live patching. *Pro-*

ceedings of the VLDB Endowment, 17 (13):4557–4570, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704966.

Li:2024:TTB

[3942] Guanghua Li, Hao Zhang, Xibo Sun, Qiong Luo, and Yuanyuan Zhu. TenGraph: a tensor-based graph query engine. *Proceedings of the VLDB Endowment*, 17(13):4571–4584, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704967.

Chan:2024:LLA

[3943] Tsz Nam Chan, Bojian Zhu, Dingming Wu, Yun Peng, and Leong Hou U. LARGE: a length-aggregation-based grid structure for line density visualization. *Proceedings of the VLDB Endowment*, 17(13):4585–4598, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704968.

Zhang:2024:CCC

[3944] Haoran Zhang, Shuai Mu, Sebastian Angel, and Vincent Liu. CausalMesh: a causal cache for stateful serverless computing. *Proceedings of the VLDB Endowment*, 17(13):4599–4613, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704969.

Bellomarini:2024:VPS

[3945] Luigi Bellomarini, Davide Benedetto, Matteo Brandetti, Emanuel Sallinger, and Adriano Vlad. The Vadalog parallel system: Distributed reasoning with Datalog+/-. *Proceedings of the VLDB Endowment*, 17(13):4614–4626, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704970.

Xiu:2024:PPA

[3946] Haibo Xiu, Pankaj K. Agarwal, and Jun Yang. PARQO: Penalty-aware robust plan selection in query optimization. *Proceedings of the VLDB Endowment*, 17(13):4627–4640, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704971.

Xu:2024:IRK

[3947] Zezhong Xu, Yincen Qu, Wen Zhang, Lei Liang, and Huajun Chen. InBox: Recommendation with knowledge graph using interest box embedding. *Proceedings of the VLDB Endowment*, 17(13):4641–4654, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704972.

He:2024:BBA

[3948] Zongyan He and Jeffrey Xu Yu. A branch-&-bound algorithm for fractional hypertree decomposition. *Proceedings of the VLDB Endowment*, 17 (13):4655–4667, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704973.

Wang:2024:SHQ

[3949] Zeyu Wang, Qitong Wang, Xiaoxing Cheng, Peng Wang, Themis Palpanas, and Wei Wang. Steiner-hardness: a query hardness measure for graph-based ANN indexes.

Proceedings of the VLDB Endowment, 17(13):4668–4682, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704974.

Wang:2024:SME

[3950] Yiqi Wang, Long Yuan, Wenjie Zhang, Zi Chen, Xuemin Lin, and Qing Liu. Simpler is more: Efficient top-K nearest neighbors search on large road networks. *Proceedings of the VLDB Endowment*, 17(13):4683–4695, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704975.

Fischer:2024:SEE

[3951] Tim Fischer, Denis Hirn, and Torsten Grust. SQL engines excel at the execution of imperative programs. *Proceedings of the VLDB Endowment*, 17(13):4696–4708, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704976.

Yogatama:2024:SYH

[3952] Bobbi Yogatama, Weiwei Gong, and Xiangyao Yu. Scaling your hybrid CPU-GPU DBMS to multiple GPUs. *Proceedings of the VLDB Endowment*, 17(13):4709–4722, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704977.

Abduvakhobov:2024:SMB

[3953] Abduvoris Abduvakhobov, Søren Kejser Jensen, Torben Bach Pedersen, and Christian Thomsen. Scalable model-based management of massive high frequency wind turbine data with ModelarDB. *Proceedings of the VLDB Endowment*, 17(13):4723–4732, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704978.

Kashi:2024:ED

[3954] Tejasvi Kashi, Kenneth Salem, Jaemyung Kim, and Khuzaima Daudjee. Eventual durability. *Proceedings of the VLDB Endowment*, 17(13):4733–4745, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704979.

Qiu:2024:TTT

[3955] Ruizhong Qiu, Jun-Gi Jang, Xiao Lin, Lihui Liu, and Hanghang Tong. TUCKET: a tensor time series data structure for efficient and accurate factor analysis over time ranges. *Proceedings of the VLDB Endowment*, 17(13):4746–4759, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704980.

Meng:2024:TPG

[3956] Yuchen Meng, Rong-Hua Li, Longlong Lin, Xunkai Li, and Guoren Wang. Topology-preserving graph coarsening: an elementary collapse-based approach. *Proceedings of the VLDB Endowment*, 17(13):4760–4772, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704981.

Liu:2024:ECM

[3957] Guanli Liu, Lars Kulik, Christian S. Jensen, Tianyi Li, Renata Borovica-Gajic, and Jianzhong Qi. Efficient cost modeling of space-filling curves. *Proceedings of the VLDB Endowment*, 17(13):4773–4785, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704982.

Reis:2024:GDC

[3958] Eduardo Reis, Mohamed Abdelaal, and Carsten Binnig. Generalizable data cleaning of tabular data in latent space. *Proceedings of the VLDB Endowment*, 17(13):4786–4798, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704983.

Anadiotis:2024:DGD

[3959] Angelos Christos Anadiotis, Muhammad Ghufran Khan, and Ioana Manolescu. Dynamic graph databases with out-of-order updates. *Proceedings of the VLDB Endowment*, 17(13):4799–4812, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704984.

Zeng:2024:PDD

[3960] Lingze Zeng, Naili Xing, Shaofeng Cai, Gang Chen, Beng Chin Ooi, Jian Pei, and Yuncheng Wu. Powering in-database dynamic model slicing for structured data analytics. *Proceedings of the VLDB Endowment*, 17(13):4813–4826, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704985.

Li:2024:GGS

[3961] Hongfu Li, Qian Tao, Song Yu, Shufeng Gong, Yanfeng Zhang, Feng Yao, Wenyuan Yu, Ge Yu, and Jingren Zhou. GastCoCo: Graph storage and coroutine-based prefetch codesign for dynamic graph processing. *Proceedings of the VLDB Endowment*, 17(13):4827–4839, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704986.

Ding:2024:MEC

[3962] Xiaoou Ding, Yichen Song, Hongzhi Wang, Chen Wang, and Donghua Yang. MTSClean: Efficient constraint-based cleaning for multi-dimensional time series data. *Proceedings of the VLDB Endowment*, 17(13):4840–4852, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704987.

Kiouche:2024:NPG

[3963] Abd Errahmane Kiouche, Julien Baste, Mohammed Haddad, Hamida Seba, and Angela Bonifati. Neighborhood-preserving graph sparsification. *Proceedings of the VLDB Endowment*, 17(13):4853–4866, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704988.

Urban:2024:EEL

[3964] Matthias Urban and Carsten Binnig. ELEET: Efficient learned query execution over text and tables. *Proceedings of the VLDB Endowment*, 17(13):4867–4880, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3704965.3704989.

Arch:2024:KEU

[3965] Samuel Arch, Yuchen Liu, Todd C. Mowry, Jignesh M. Patel, and Andrew

Pavlo. The key to effective UDF optimization: Before inlining, first perform outlining. *Proceedings of the VLDB Endowment*, 18(1):1–13, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696436.

Hajidehi:2024:CSG

[3966] Milad Rezaei Hajidehi, Sraavan Sridhar, and Margo Seltzer. CUTTANA: Scalable graph partitioning for faster distributed graph databases and analytics. *Proceedings of the VLDB Endowment*, 18(1):14–27, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696437.

Moerkotte:2024:CEH

[3967] Guido Moerkotte. Cardinality estimation for having-clauses. *Proceedings of the VLDB Endowment*, 18 (1):28–41, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696438.

Jiang:2024:CHD

[3968] Wenqi Jiang, Marco Zeller, Roger Waleffe, Torsten Hoefler, and Gustavo Alonso. Chameleon: a heterogeneous and disaggregated accelerator system for retrieval-augmented language models. *Proceedings of the VLDB Endowment*, 18(1):42–52, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696439.

Li:2024:LRL

[3969] Zhaodonghui Li, Haitao Yuan, Huiming Wang, Gao Cong, and Lidong Bing. LLM-R^2: a large language model enhanced rule-based rewrite system for boosting query efficiency. *Proceedings of the VLDB Endowment*, 18 (1):53–65, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696440.

Yu:2024:NBD

[3970] Hanfei Yu, Jacob Carter, Hao Wang, Devesh Tiwari, Jian Li, and Seung-Jong Park. Nitro: Boosting distributed reinforcement learning with serverless computing. *Proceedings of the VLDB Endowment*, 18(1):66–79, September 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3696435.3696441.

Zhou:2024:RET

[3971] Silin Zhou, Shuo Shang, Lisi Chen, Christian S. Jensen, and Panos Kalnis. RED: Effective trajectory representation learning with comprehensive information. *Proceedings of the VLDB Endowment*, 18(2):80–92, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705830.

Arpaci-Dusseau:2024:AFA

[3972] Anna Arpaci-Dusseau, Zixiang Zhou, and Xuhao Chen. Accurate and fast approximate graph pattern mining at scale. *Proceedings of the VLDB Endowment*, 18(2):93–107, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705831.

Tang:2024:QGD

[3973] Xiu Tang, Wenhao Liu, Sai Wu, Chang Yao, Gongsheng Yuan, Shanshan Ying, and Gang Chen. QueryArtisan: Generating data manipulation codes for ad-hoc analysis in data lakes. *Proceedings of the VLDB Endowment*, 18(2):108–116, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705832.

Huang:2024:EEA

[3974] Yiqian Huang, Shiqi Zhang, Laks V. S. Lakshmanan, Wenqing Lin, Xiaokui Xiao, and Bo Tang. Efficient and effective algorithms for a family of influence maximization problems with a matroid constraint. *Proceedings of the VLDB Endowment*, 18(2):117–129, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705833.

Deeds:2024:CFA

[3975] Kyle Deeds, Diandre Sabale, Moe Kayali, and Dan Suciu. Color: a framework for applying graph coloring to subgraph cardinality estimation. *Proceedings of the VLDB Endowment*, 18(2):130–143, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705834.

Wu:2024:FAC

[3976] Xinle Wu, Xingjian Wu, Dalin Zhang, Miao Zhang, Chenjuan Guo, Bin Yang, and Christian S. Jensen. Fully automated correlated time series forecasting in minutes. *Proceedings of the VLDB Endowment*, 18(2):144–157, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705835.

Markakis:2024:LCI

[3977] Markos Markakis, Brit Youngmann, Trinity Gao, Ziyu Zhang, Rana Shahout, Peter Baile Chen, Chunwei Liu, Ibrahim Sabek, and Michael Cafarella. From logs to causal inference: Diagnosing large systems. *Proceedings of the VLDB Endowment*, 18(2):158–172, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705836.

Ai:2024:NLB

[3978] Xin Ai, Hao Yuan, Zeyu Ling, Qiange Wang, Yanfeng Zhang, Zhenbo Fu, Chaoyi Chen, Yu Gu, and Ge Yu. NeutronTP: Load-balanced distributed full-graph GNN training with tensor parallelism. *Proceedings of the VLDB Endowment*, 18(2):173–186, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705837.

Liu:2024:UPE

[3979] Yuhan Liu, Sheng Wang, Yixuan Liu, Feifei Li, and Hong Chen. Unleash the power of ellipsis: Accuracy-enhanced sparse vector technique with exponential noise. *Proceedings of the VLDB Endowment*, 18(2):187–199, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705838.

Chang:2024:MDC

[3980] Lijun Chang. Maximum defective clique computation: Improved time complexities and practical performance. *Proceedings of the VLDB Endowment*, 18(2):200–212, October 2024. CODEN ???? ISSN 2150-8097.

URL https://dl.acm.org/doi/10.14778/3705829.3705839.

Tang:2024:SAL

[3981] Yanni Tang, Zhuoxing Zhang, Kaiqi Zhao, Lanting Fang, Zhenhua Li, and Wu Chen. Substructure-aware log anomaly detection. *Proceedings of the VLDB Endowment*, 18(2):213–225, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705840.

Miao:2024:LME

[3982] Hao Miao, Ziqiao Liu, Yan Zhao, Chenjuan Guo, Bin Yang, Kai Zheng, and Christian S. Jensen. Less is more: Efficient time series dataset condensation via two-fold modal matching. *Proceedings of the VLDB Endowment*, 18 (2):226–238, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705841.

Cheng:2024:MGT

[3983] Yunyao Cheng, Chenjuan Guo, Bin Yang, Haomin Yu, Kai Zhao, and Christian S. Jensen. A memory guided transformer for time series forecasting. *Proceedings of the VLDB Endowment*, 18(2):239–252, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705842.

Hu:2024:LLP

[3984] Chuxuan Hu, Austin Peters, and Daniel Kang. LEAP: LLM-powered end-to-end automatic library for processing social science queries on unstructured data. *Proceedings of the VLDB Endowment*, 18(2):253–264, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705843.

Kieu:2024:TTE

[3985] Duc Kieu, Tung Kieu, Peng Han, Bin Yang, Christian S. Jensen, and Bac Le. TEAM: Topological evolution-aware framework for traffic forecasting. *Proceedings of the VLDB Endowment*, 18(2):265–278, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705844.

Lee:2024:CSD

[3986] Geonho Lee, Jeongho Park, and Min-Soo Kim. Chimera: a system design of dual storage and traversal-join unified query processing for SQL/PGQ. *Proceedings of the VLDB Endowment*, 18(2):279–292, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705845.

Merkel:2024:CGR

[3987] Nikolai Merkel, Pierre Toussing, Ruben Mayer, and Hans-Arno Jacobsen. Can graph reordering speed up graph neural network training? An experimental study. *Proceedings of the VLDB Endowment*, 18(2):293–307, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705846.

Zhu:2024:HAR

[3988] Xiaoke Zhu, Min Xie, Ting Deng, and Qi Zhang. HyperBlocker: Accelerating rule-based blocking in entity resolution using GPUs. *Proceedings of the VLDB Endowment*, 18(2):308–321, October 2024. CODEN ???? ISSN 2150-

8097. URL https://dl.acm.org/doi/10.14778/3705829.3705847.

Jiang:2024:CNG

[3989] Yangfan Jiang, Xinjian Luo, Yin Yang, and Xiaokui Xiao. Calibrating noise for group privacy in subsampled mechanisms. *Proceedings of the VLDB Endowment*, 18(2):322–334, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705848.

Liu:2024:OFC

[3990] Yi Liu, Minghao Xie, Shouqian Shi, Yuanchao Xu, Heiner Litz, and Chen Qian. Outback: Fast and communication-efficient index for key–value store on disaggregated memory. *Proceedings of the VLDB Endowment*, 18(2):335–348, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705849.

Mao:2024:MCE

[3991] Yunhao Mao, Gengrui Zhang, Zongxin Liu, Pezhman Nasirifard, Sofia Tijanic, and Hans-Arno Jacobsen. Making CRDTs not so eventual. *Proceedings of the VLDB Endowment*, 18 (2):349–362, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705850.

Gao:2024:MPS

[3992] Shuohao Gao, Kaiqiang Yu, Shengxin Liu, and Cheng Long. Maximum k-plex search: an alternated reduction-and-bound method. *Proceedings of the VLDB Endowment*, 18(2):363–376, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705851.

Schafer:2024:DLM

[3993] Patrick Schäfer and Ulf Leser. Discovering leitmotifs in multidimensional time series. *Proceedings of the VLDB Endowment*, 18(2):377–389, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705852.

Yang:2024:SSL

[3994] Chuang Yang, Renhe Jiang, Xiaohang Xu, Chuan Xiao, and Kaoru Sezaki. SIMformer: Single-layer vanilla transformer can learn free-space trajectory similarity. *Proceedings of the VLDB Endowment*, 18(2):390–398, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705853.

Wang:2024:CCU

[3995] Junchang Wang and Manos Athanassoulis. CUBIT: Concurrent updatable bitmap indexing. *Proceedings of the VLDB Endowment*, 18(2):399–412, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705854.

Ge:2024:PED

[3996] Yunqing Ge, Jianbin Qin, Shuyuan Zheng, Yongrui Zhong, Bo Tang, Yu-Xuan Qiu, Rui Mao, Ye Yuan, Makoto Onizuka, and Chuan Xiao. Privacy-enhanced database synthesis for benchmark publishing. *Proceedings of the VLDB Endowment*, 18(2):413–425, October 2024. CODEN ???? ISSN 2150-8097. URL https://dl.acm.org/doi/10.14778/3705829.3705855.

Hong:2024:TGA

[3997] Kijae Hong, Kyoungmin Kim, Young-Koo Lee, Yang-Sae Moon, Sourav S. Bhowmick, and Wook-Shin Han. Themis: a GPU-accelerated relational query execution engine. *Proceedings of the VLDB Endowment*, 18 (2):426–438, October 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3705829.3705856`.

Agmon:2024:FCV

[3998] Shunit Agmon, Amir Gilad, Brit Youngmann, Shahar Zoarets, and Benny Kimelfeld. Finding convincing views to endorse a claim. *Proceedings of the VLDB Endowment*, 18 (2):439–452, October 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3705829.3705857`.

Song:2024:QPC

[3999] Yumeng Song, Yu Gu, Tianyi Li, Yushuai Li, Christian S. Jensen, and Ge Yu. Quantifying point contributions: a lightweight framework for efficient and effective query-driven trajectory simplification. *Proceedings of the VLDB Endowment*, 18(2):453–465, October 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3705829.3705858`.

Deng:2024:MGM

[4000] Liwei Deng, Tianfu Wang, Yan Zhao, and Kai Zheng. MILLION: a general multi-objective framework with controllable risk for portfolio management. *Proceedings of the VLDB Endowment*, 18(2):466–474, October 2024. CODEN ???? ISSN 2150-8097. URL `https://dl.acm.org/doi/10.14778/3705829.3705859`.

Liu:2024:CRS

[4001] Yuxi Liu, Fangzhu Shen, Kushagra Ghosh, Amir Gilad, Benny Kimelfeld, and Sudeepa Roy. The cost of representation by subset repairs. *Proceedings of the VLDB Endowment*, 18(2): 475–487, October 2024. CODEN ???? ISSN 2150-8097.

Zhao:2024:COU

[4002] Mark Zhao, Emanuel Adamiak, and Christos Kozyrakis. cedar: Optimized and unified machine learning input data pipelines. *Proceedings of the VLDB Endowment*, 18(2):488–502, October 2024. CODEN ???? ISSN 2150-8097.

Sanghavi:2024:GST

[4003] Monil Mukesh Sanghavi, Ming-May Hu, Zhenxiao Luo, Xiao Li, and Kapil Bajaj. Goku: a schemaless time series database for large scale monitoring at Pinterest. *Proceedings of the VLDB Endowment*, 18(2):503–515, October 2024. CODEN ???? ISSN 2150-8097.

Qiang:2024:AOL

[4004] Zhangcheng Qiang, Weiqing Wang, and Kerry Taylor. Agent-OM: Leveraging LLM agents for ontology matching. *Proceedings of the VLDB Endowment*, 18(3):516–529, November 2024. CODEN ???? ISSN 2150-8097.

Li:2024:GES

[4005] Xue Li, Weibin Zeng, Zhibin Wang, Diwen Zhu, Jingbo Xu, Wenyuan Yu, and Jingren Zhou. GraphAr: an efficient storage scheme for graph data in data lakes. *Proceedings of the VLDB Endowment*, 18(3):530–543, November 2024. CODEN ???? ISSN 2150-8097.

Lan:2024:CES

[4006] Hai Lan, Shixun Huang, Zhifeng Bao, and Renata Borovica-Gajic. Cardinality estimation for similarity search on high-dimensional data objects: The impact of reference objects. *Proceedings of the VLDB Endowment*, 18(3):544–556, November 2024. CODEN ???? ISSN 2150-8097.

Lee:2024:ETF

[4007] Seonho Lee, Yeunjun Lee, and Kunsoo Park. Efficient top-k frequent subgraph mining using tight upper and lower bounds. *Proceedings of the VLDB Endowment*, 18(3):557–570, November 2024. CODEN ???? ISSN 2150-8097.

Liu:2024:MMS

[4008] Hao Liu, Qianwen Yang, Taoyong Cui, and Wei Wang. MSGNN: Masked schema based graph neural networks. *Proceedings of the VLDB Endowment*, 18(3):571–584, November 2024. CODEN ???? ISSN 2150-8097.

Tahir:2024:HRS

[4009] Jawad Tahir, Ruben Mayer, Christoph Doblander, and Hans-Arno Jacobsen. How reliable are streams? End-to-end processing-guarantee validation and performance benchmarking of stream processing systems. *Proceedings of the VLDB Endowment*, 18(3):585–598, November 2024. CODEN ???? ISSN 2150-8097.

Lin:2024:TSG

[4010] Yinnian Lin, Lei Zou, and Xunbin Su. Towards sufficient GPU-accelerated dynamic graph management: Survey and experiment. *Proceedings of the VLDB Endowment*, 18(3):599–612, November 2024. CODEN ???? ISSN 2150-8097.

Shang:2024:RDP

[4011] Zhuocheng Shang, Samriddhi Singla, Ahmed Eldawy, and Elia Scudiero. RDPro: Distributed processing of big raster data: [scalable data science]. *Proceedings of the VLDB Endowment*, 18(3):613–622, November 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:AAD

[4012] Qi Zhang, Yalong Zhang, Rong-Hua Li, and Guoren Wang. Approximate anchored densest subgraph search on large static and dynamic graphs. *Proceedings of the VLDB Endowment*, 18(3):623–636, November 2024. CODEN ???? ISSN 2150-8097.

Zeng:2024:PPM

[4013] Tianjing Zeng, Junwei Lan, Jiahong Ma, Wenqing Wei, Rong Zhu, Yingli Zhou, Pengfei Li, Bolin Ding, Defu Lian, Zhewei Wei, and Jingren Zhou. PRICE: a pretrained model for cross-database cardinality estimation. *Proceedings of the VLDB Endowment*, 18(3):637–650, November 2024. CODEN ???? ISSN 2150-8097.

Gilray:2024:DFC

[4014] Thomas Gilray, Arash Sahebolamri, Yihao Sun, Sowmith Kunapaneni, Sidharth Kumar, and Kristopher Micinski. Datalog with first-class facts. *Proceedings of the VLDB Endowment*, 18(3):651–665, November 2024. CODEN ???? ISSN 2150-8097.

Zhu:2024:AED

[4015] Junhao Zhu, Tao Wang, Danlei Hu, Ziquan Fang, Lu Chen, Yunjun Gao, Tianyi Li, and Christian S. Jensen. T-Assess: an efficient data quality assessment system tailored for trajectory data. *Proceedings of the VLDB Endowment*, 18(3):666–674, November 2024. CODEN ???? ISSN 2150-8097.

Ye:2024:LLC

[4016] Junhao Ye, Jiahui Li, Lu Chen, Yuren Mao, Yunjun Gao, and Tianyi Li. LEAP: a low-cost spark SQL query optimizer using pairwise comparison. *Proceedings of the VLDB Endowment*, 18(3):675–687, November 2024. CODEN ???? ISSN 2150-8097.

Cao:2024:TPO

[4017] Xinle Cao, Weiqi Feng, Jian Liu, Jinjin Zhou, Wenjing Fang, Lei Wang, Quanqing Xu, Chuanhui Yang, and Kui Ren. Towards practical oblivious map. *Proceedings of the VLDB Endowment*, 18 (3):688–701, November 2024. CODEN ???? ISSN 2150-8097.

Ruan:2024:PAD

[4018] Chaoyi Ruan, Yingqiang Zhang, Juncheng Zhang, Cheng Li, Xiaosong Ma, Hao Chen, Jie Zhou, Feifei Li, and Xinjun Yang. PolyBase: Adapting to data affinity changes in geo-replicated database via row-level consensus-group affiliation re-assignment. *Proceedings of the VLDB Endowment*, 18(3):702–714, November 2024. CODEN ???? ISSN 2150-8097.

Fan:2024:EGB

[4019] Wenfei Fan, Lihang Fan, Dandan Lin, and Min Xie. Explaining GNN-based recommendations in logic. *Proceedings of the VLDB Endowment*, 18(3):715–728, November 2024. CODEN ???? ISSN 2150-8097.

Yin:2024:ECH

[4020] Haozhe Yin, Kai Wang, Wenjie Zhang, Ying Zhang, Ruijia Wu, and Xuemin Lin. Efficient computation of hypertriangles on hypergraphs. *Proceedings of the VLDB Endowment*, 18(3):729–742, November 2024. CODEN ???? ISSN 2150-8097.

Huang:2024:LBA

[4021] Yuwei Huang and Guoliang Li. Laser: Buffer-aware learned query scheduling in master-standby databases. *Proceedings of the VLDB Endowment*, 18(3): 743–755, November 2024. CODEN ???? ISSN 2150-8097.

Liu:2024:SMS

[4022] Yang Liu, Wenfei Fan, Shuhao Liu, Xiaoke Zhu, and Jianxin Li. A single machine system for querying big graphs with PRAM. *Proceedings of the VLDB Endowment*, 18(3):756–769, November 2024. CODEN ???? ISSN 2150-8097.

Li:2024:CGH

[4023] Jiajia Li, Yongzhi Chen, Mengxuan Zhang, and Lei Li. A CPU-GPU hybrid labelling algorithm for massive shortest distance queries on road networks. *Proceedings of the VLDB Endowment*, 18 (3):770–783, November 2024. CODEN ???? ISSN 2150-8097.

Ye:2024:SEE

[4024] Fei Ye, Zikang Liu, Xi Zhang, Yinan Jing, Zhenying He, Yuxin Che, Haoran Xiong, Kai Zhang, and X. Sean Wang. SDEcho: Efficient explanation of aggregated sequence difference. *Proceedings of the VLDB Endowment*, 18 (3):784–797, November 2024. CODEN ???? ISSN 2150-8097.

Tang:2024:MMB

[4025] Qideng Tang, Chaofan Dai, Yahui Wu, and Haohao Zhou. MLP-Mixer based masked autoencoders are effective, explainable and robust for time series anomaly detection. *Proceedings of the VLDB Endowment*, 18(3):798–811, November 2024. CODEN ???? ISSN 2150-8097.

Deng:2024:EDA

[4026] Liwei Deng, Penghao Chen, Ximu Zeng, Tianfu Wang, Yan Zhao, and Kai Zheng. Efficient data-aware distance comparison operations for high-dimensional approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 18(3):812–821, November 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:SAB

[4027] Shijie Zhang, Ru Cheng, Xinpeng Liu, Jiang Xiao, Hai Jin, and Bo Li. Seer: Accelerating blockchain transaction execution by fine-grained branch prediction. *Proceedings of the VLDB Endowment*, 18(3):822–835, November 2024. CODEN ???? ISSN 2150-8097.

Yu:2024:PBS

[4028] Shangdi Yu, Jessica Shi, Jamison Meindl, David Eisenstat, Xiaoen Ju, Sasan Tavakkol, Laxman Dhulipala, Jakub Łacki, Vahab Mirrokni, and Julian Shun. The ParClusterers Benchmark Suite (PCBS): a fine-grained analysis of scalable graph clustering. *Proceedings of the VLDB Endowment*, 18(3):836–849, November 2024. CODEN ???? ISSN 2150-8097.

Liu:2024:SCT

[4029] Shuang Liu, Chenglin Tian, Jun Sun, Ruifeng Wang, Wei Lu, Yongxin Zhao, Yinxing Xue, Junjie Wang, and Xiaoyong Du. Semantic conformance testing of relational DBMS. *Proceedings of the VLDB Endowment*, 18(3):850–862, November 2024. CODEN ???? ISSN 2150-8097.

Mo:2024:RLR

[4030] Songsong Mo, Yue Zhao, Zhifeng Bao, Quanqing Xu, Chuanhui Yang, and Gao Cong. RankPQO: Learning-to-rank for parametric query optimization. *Proceedings of the VLDB Endowment*, 18(3):863–875, November 2024. CODEN ???? ISSN 2150-8097.

Hadar:2024:DDT

[4031] Aviv Hadar, Tova Milo, and Kathy Razmadze. Datamap-driven tabular coreset selection for classifier training. *Proceedings of the VLDB Endowment*, 18(3):876–888, November 2024. CODEN ???? ISSN 2150-8097.

DeMan:2024:TSP

[4032] Quinten De Man, Laxman Dhulipala, Adam Karczmarz, Jakub Łacki, Julian Shun, and Zhongqi Wang. Towards scalable and practical batch-dynamic connectivity. *Proceedings of the VLDB Endowment*, 18(3):889–901, November 2024. CODEN ???? ISSN 2150-8097.

Ni:2024:IER

[4033] Shengquan Ni, Yicong Huang, Zuozhi Wang, and Chen Li. IcedTea: Efficient and responsive time-travel debugging in dataflow systems. *Proceedings* *of the VLDB Endowment*, 18(3):902–914, November 2024. CODEN ???? ISSN 2150-8097.

Lee:2024:RTS

[4034] Ge Lee, Shixun Huang, Zhifeng Bao, and Yanchang Zhao. Representative time series discovery for data exploration. *Proceedings of the VLDB Endowment*, 18(3):915–928, November 2024. CODEN ???? ISSN 2150-8097.

Song:2024:EGE

[4035] Yifan Song, Xiaolong Chen, Wenqing Lin, Jia Li, Chen Zhang, Yan Zhou, Lei Chen, and Jing Tang. Efficient graph embedding generation and update for large-scale temporal graph. *Proceedings of the VLDB Endowment*, 18(4): 929–942, December 2024. CODEN ???? ISSN 2150-8097.

Mohammed:2024:FMT

[4036] Haneen Mohammed, Alexander Yao, Charlie Summers, Hongbin Zhong, Gromit Yeuk-Yin Chan, Subrata Mitra, Lampros Flokas, and Eugene Wu. FaDE: More than a million what-ifs per second. *Proceedings of the VLDB Endowment*, 18(4):943–955, December 2024. CODEN ???? ISSN 2150-8097.

Yang:2024:TIT

[4037] Yuxin Yang, Hongkuan Zhou, Rajgopal Kannan, and Viktor Prasanna. Towards ideal temporal graph neural networks: Evaluations and conclusions after 10,000 GPU hours. *Proceedings of the VLDB Endowment*, 18(4):956–969, December 2024. CODEN ???? ISSN 2150-8097.

Li:2024:KTT

[4038] Zhaoheng Li, Supawit Chockchowwat, Ribhav Sahu, Areet Sheth, and Yongjoo Park. Kishu: Time-traveling for computational notebooks. *Proceedings of the VLDB Endowment*, 18(4): 970–985, December 2024. CODEN ???? ISSN 2150-8097.

Ma:2024:GGB

[4039] Ruiyao Ma, Yifan Zhu, Baihua Zheng, Lu Chen, Congcong Ge, and Yunjun Gao. GTI: Graph-based tree index with logarithm updates for nearest neighbor search in high-dimensional spaces. *Proceedings of the VLDB Endowment*, 18 (4):986–999, December 2024. CODEN ???? ISSN 2150-8097.

Kaminsky:2024:IDD

[4040] Youri Kaminsky, Eduardo H. M. Pena, and Felix Naumann. Incremental detection of denial constraint violations. *Proceedings of the VLDB Endowment*, 18(4):1000–1012, December 2024. CODEN ???? ISSN 2150-8097.

Chang:2024:RCT

[4041] Zhihao Chang, Linzhu Yu, Huan Li, Sai Wu, Gang Chen, and Dongxiang Zhang. Revisiting CNNs for trajectory similarity learning. *Proceedings of the VLDB Endowment*, 18(4):1013–1021, December 2024. CODEN ???? ISSN 2150-8097.

Chu:2024:MSB

[4042] Deming Chu, Zhizhi Gao, Fan Zhang, Wenjie Zhang, Xuemin Lin, and Zhihong Tian. Most similar biclique search at scale. *Proceedings of the VLDB Endowment*, 18(4):1022–1034, December 2024. CODEN ???? ISSN 2150-8097.

Wang:2024:SSA

[4043] Chenghong Wang, Lina Qiu, Johes Bater, and Yukui Luo. SPECIAL: SynoPsis AssistEd Secure Collaborative

AnaLytics. *Proceedings of the VLDB Endowment*, 18(4):1035–1048, December 2024. CODEN ???? ISSN 2150-8097.

Lin:2024:IDO

[4044] Qingyin Lin, Jiangsu Du, Rui Li, Zhiguang Chen, Wenguang Chen, and Nong Xiao. IncrCP: Decomposing and orchestrating incremental checkpoints for effective recommendation model training. *Proceedings of the VLDB Endowment*, 18(4):1049–1062, December 2024. CODEN ???? ISSN 2150-8097.

Guan:2024:WWS

[4045] Naiqing Guan and Nick Koudas. WeShap: Weak supervision source evaluation with Shapley values. *Proceedings of the VLDB Endowment*, 18(4):1063–1076, December 2024. CODEN ???? ISSN 2150-8097.

Yu:2024:JLT

[4046] Weiping Yu, Fan Wang, Xuwei Zhang, and Siqiang Luo. Are joins over LSM-trees ready? Take RocksDB as an example. *Proceedings of the VLDB Endowment*, 18(4):1077–1090, December 2024. CODEN ???? ISSN 2150-8097.

Wu:2024:IGS

[4047] Zheng Wu, Xuliang Zhu, Yixiang Fang, Jianliang Xu, and Xin Huang. Interactive graph search for multiple targets on DAGs. *Proceedings of the VLDB Endowment*, 18(4):1091–1103, December 2024. CODEN ???? ISSN 2150-8097.

Xu:2024:AAN

[4048] Xianghong Xu, Tieying Zhang, Xiao He, Haoyang Li, Rong Kang, Shuai Wang, Linhui Xu, Zhimin Liang, Shangyu Luo, Lei Zhang, and Jianjun Chen. AdaNDV: Adaptive number of distinct value estimation via learning to select and fuse estimators. *Proceedings of the VLDB Endowment*, 18(4):1104–1117, December 2024. CODEN ???? ISSN 2150-8097.

Liang:2024:UUI

[4049] Anqi Liang, Pengcheng Zhang, Bin Yao, Zhongpu Chen, Yitong Song, and Guangxu Cheng. UNIFY: Unified index for range filtered approximate nearest neighbors search. *Proceedings of the VLDB Endowment*, 18(4):1118–1130, December 2024. CODEN ???? ISSN 2150-8097.

Zhou:2024:DAD

[4050] Yingli Zhou, Qingshuo Guo, Yi Yang, Yixiang Fang, Chenhao Ma, and Laks V. S. Lakshmanan. In-depth analysis of densest subgraph discovery in a unified framework. *Proceedings of the VLDB Endowment*, 18(4):1131–1144, December 2024. CODEN ???? ISSN 2150-8097.

Zhao:2024:SRA

[4051] Fuheng Zhao, Shaleen Deep, Fotis Psallidas, Avrilia Floratou, Divyakant Agrawal, and Amr El Abbadi. Sphinteract: Resolving ambiguities in NL2SQL through user interaction. *Proceedings of the VLDB Endowment*, 18(4):1145–1158, December 2024. CODEN ???? ISSN 2150-8097.

Zhuang:2024:NMC

[4052] Zhihao Zhuang, Yingying Zhang, Kai Zhao, Chenjuan Guo, Bin Yang, Qingsong Wen, and Lunting Fan. Noise matters: Cross contrastive learning for Flink anomaly detection. *Proceedings* *of the VLDB Endowment*, 18(4):1159–1168, December 2024. CODEN ???? ISSN 2150-8097.

Ouyang:2024:RMR

[4053] Biao Ouyang, Yingying Zhang, Hanyin Cheng, Yang Shu, Chenjuan Guo, Bin Yang, Qingsong Wen, Lunting Fan, and Christian S. Jensen. RCRank: Multimodal ranking of root causes of slow queries in cloud database systems. *Proceedings of the VLDB Endowment*, 18 (4):1169–1182, December 2024. CODEN ???? ISSN 2150-8097.

Abdallah:2024:RID

[4054] Hassan Abdallah, Béatrice Markhoff, and Arnaud Soulet. Ranking indicator discovery from very large knowledge graphs. *Proceedings of the VLDB Endowment*, 18(4):1183–1195, December 2024. CODEN ???? ISSN 2150-8097.

Bajaj:2024:GNN

[4055] Saurabh Bajaj, Hojae Son, Juelin Liu, Hui Guan, and Marco Serafini. Graph neural network training systems: a performance comparison of full-graph and mini-batch. *Proceedings of the VLDB Endowment*, 18(4):1196–1209, December 2024. CODEN ???? ISSN 2150-8097.

Su:2024:DAI

[4056] Qingdong Su, Zhikang Wang, Zijing Tan, and Shuai Ma. Discovering approximate inclusion dependencies. *Proceedings of the VLDB Endowment*, 18 (4):1210–1222, December 2024. CODEN ???? ISSN 2150-8097.

Zhuang:2024:DLB

[4057] Zhutao Zhuang, Xinqi Zeng, and Zhiguang Chen. DumpKV: Learning based lifetime aware garbage collection for key value separation in LSM-Tree. *Proceedings of the VLDB Endowment*, 18(4):1223–1236, December 2024. CODEN ???? ISSN 2150-8097.

Zhang:2024:RSA

[4058] Boyu Zhang, He Huang, Yu-E Sun, and Guoju Gao. RGS-Sketch: an accurate, invertible, and mergeable sketch for online super spreader detection in high-speed data streams. *Proceedings of the VLDB Endowment*, 18(4):1237–1249, December 2024. CODEN ???? ISSN 2150-8097.

Yuan:2024:VOM

[4059] Yichao Yuan, Advait Iyer, Lin Ma, and Nishil Talati. Vortex: Overcoming memory capacity limitations in GPU-Accelerated large-scale data analytics. *Proceedings of the VLDB Endowment*, 18(4):1250–1263, December 2024. CODEN ???? ISSN 2150-8097.

Gavrielatos:2025:DSC

[4060] Vasilis Gavrielatos, Antonios Katsarakis, Chris Jensen, and Nikos Ntarmos. Dandelion: Smaller clusters, bigger speeds-distributed transactions redefined. *Proceedings of the VLDB Endowment*, 18(5):1264–1277, January 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:EES

[4061] Xiaoying Wang, Wentao Wu, Vivek Narasayya, and Surajit Chaudhuri. Esc: an early-stopping checker for budget-aware index tuning. *Proceedings of the VLDB Endowment*, 18(5): 1278–1290, January 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:JEO

[4062] Yilei Wang, Xiangdong Zeng, Sheng Wang, and Feifei Li. Jodes: Efficient oblivious join in the distributed setting. *Proceedings of the VLDB Endowment*, 18(5):1291–1304, January 2025. CODEN ???? ISSN 2150-8097.

Li:2025:OCB

[4063] Xunkai Li, Yinlin Zhu, Boyang Pang, Guochen Yan, Yeyu Yan, Zening Li, Zhengyu Wu, Wentao Zhang, Rong-Hua Li, and Guoren Wang. OpenFGL: a comprehensive benchmark for federated graph learning. *Proceedings of the VLDB Endowment*, 18(5):1305–1320, January 2025. CODEN ???? ISSN 2150-8097.

Langhi:2025:ECQ

[4064] Samuele Langhi, Angela Bonifati, and Riccardo Tommasini. Evaluating continuous queries with inconsistency annotations. *Proceedings of the VLDB Endowment*, 18(5):1321–1334, January 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:MEV

[4065] Zhi Wang, Ming Zhong, Yuanyuan Zhu, Tieyun Qian, Mengchi Liu, and Jeffrey Xu Yu. On more efficiently and versatilely querying historical k-cores. *Proceedings of the VLDB Endowment*, 18(5):1335–1347, January 2025. CODEN ???? ISSN 2150-8097.

Li:2025:GRL

[4066] Yi Li and Gao Cong. GeoBloom: Revisiting lightweight models for geographic information retrieval. *Proceedings of the VLDB Endowment*, 18 (5):1348–1361, January 2025. CODEN ???? ISSN 2150-8097.

Ghasemirad:2025:VVI

[4067] Shabnam Ghasemirad, Si Liu, Christoph Sprenger, Luca Multazzu, and David Basin. VerIso: Verifiable isolation guarantees for database transactions. *Proceedings of the VLDB Endowment*, 18 (5):1362–1375, January 2025. CODEN ???? ISSN 2150-8097.

Hong:2025:HAI

[4068] Yinhao Hong, Hongyao Zhao, Wei Lu, Xiaoyong Du, Yuxing Chen, Anqun Pan, and Lixiong Zheng. A hybrid approach to integrating deterministic and non-deterministic concurrency control in database systems. *Proceedings of the VLDB Endowment*, 18(5):1376–1389, January 2025. CODEN ???? ISSN 2150-8097.

Geisler:2025:GMM

[4069] Sandra Geisler, Cinzia Cappiello, Irene Celino, David Chaves-Fraga, Anastasia Dimou, Ana Iglesias-Molina, Maurizio Lenzerini, Anisa Rula, Dylan Van Assche, Sascha Welten, and Maria-Esther Vidal. From genesis to maturity: Managing knowledge graph ecosystems through life cycles. *Proceedings of the VLDB Endowment*, 18(5):1390–1397, January 2025. CODEN ???? ISSN 2150-8097.

Lanzinger:2025:AMG

[4070] Matthias Lanzinger, Reinhard Pichler, and Alexander Selzer. Avoiding materialisation for guarded aggregate queries. *Proceedings of the VLDB Endowment*, 18(5):1398–1411, January 2025. CODEN ???? ISSN 2150-8097.

Luo:2025:SCS

[4071] Chengyang Luo, Qing Liu, Yunjun Gao, and Jianliang Xu. Synergetic community search over large multi-layer graphs. *Proceedings of the VLDB Endowment*, 18(5):1412–1424, January 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:SDS

[4072] Shu Wang, Yixiang Fang, and Wensheng Luo. Searching and detecting structurally similar communities in large heterogeneous information networks. *Proceedings of the VLDB Endowment*, 18(5):1425–1438, January 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:CDW

[4073] Gengrui Zhang, Shiquan Zhang, Michail Bachras, Yuqiu Zhang, and Hans-Arno Jacobsen. Cabinet: Dynamically weighted consensus made fast. *Proceedings of the VLDB Endowment*, 18(5):1439–1452, January 2025. CODEN ???? ISSN 2150-8097.

Dehghankar:2025:MMU

[4074] Mohsen Dehghankar and Abolfazl Asudeh. Mining the Minoria: Unknown, under-represented, and underperforming minority groups. *Proceedings of the VLDB Endowment*, 18(5): 1453–1480, January 2025. CODEN ???? ISSN 2150-8097.

Hou:2025:ECU

[4075] Guanhao Hou, Jinchao Huang, Fangyuan Zhang, and Sibo Wang. Efficient concurrent updates to persistent randomized binary search trees. *Proceedings of the VLDB Endowment*, 18(5):1481–1494, January 2025. CODEN ???? ISSN 2150-8097.

Ofek:2025:EBB

[4076] Sariel Ofek and Amit Somech. Explaining black-box clustering pipelines with cluster-explorer. *Proceedings of the VLDB Endowment*, 18(5):1495–1508, January 2025. CODEN ???? ISSN 2150-8097.

Huang:2025:BBA

[4077] Jianfeng Huang, Yihao Cao, Shubing Ren, Baohua Wu, and Dongjing Miao. BACH: Bridging adjacency list and CSR format using LSM-Trees for HGTAP workloads. *Proceedings of the VLDB Endowment*, 18(5):1509–1521, January 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:FHP

[4078] Hua Fan, Hao Tan, Wenchao Zhou, and Feifei Li. FLEET: High-performance durable replicated state machines using scattered and coordinated log entries. *Proceedings of the VLDB Endowment*, 18(5):1522–1535, January 2025. CODEN ???? ISSN 2150-8097.

Kang:2025:BHD

[4079] Guoxin Kang, Zhongxin Ge, Jingpei Hu, Xueya Zhang, Lei Wang, and Jianfeng Zhan. BigVectorBench: Heterogeneous data embedding and compound queries are essential in evaluating vector databases. *Proceedings of the VLDB Endowment*, 18(5):1536–1550, January 2025. CODEN ???? ISSN 2150-8097.

Guan:2025:SSE

[4080] Jiawei Guan, Feng Zhang, Jiesong Liu, Xiaoyong Du, and Xipeng Shen. A systematic study on early stopping metrics in HPO and the implications of uncertainty. *Proceedings of the VLDB Endowment*, 18(6):1551–1564, February 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:TDP

[4081] Haoying Zhang, Mariem Brahem, Nicolas Anciaux, Benjamin Nguyen, and Jose Maria de Fuentes. TELESAFE: Detecting Private/ work boundary crossings in energy consumption trails in telework. *Proceedings of the VLDB Endowment*, 18(6):1565–1578, February 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:FTM

[4082] Yuan Chen, Ao Li, Wenhai Li, and Lingfeng Deng. FB+-tree: a memory-optimized B+-tree with latch-free update. *Proceedings of the VLDB Endowment*, 18(6):1579–1592, February 2025. CODEN ???? ISSN 2150-8097.

Gong:2025:VDS

[4083] Shenghao Gong, Haobo Sun, Ziquan Fang, Liu Liu, Lu Chen, and Yunjun Gao. VStream: a distributed streaming vector search system. *Proceedings of the VLDB Endowment*, 18(6):1593–1606, February 2025. CODEN ???? ISSN 2150-8097.

Mang:2025:EHB

[4084] Qiuyang Mang, Jingbang Chen, Hangrui Zhou, Yu Gao, Yingli Zhou, Qingyu Shi, Richard Peng, Yixiang Fang, and Chenhao Ma. Efficient historical butterfly counting in large temporal bipartite networks via graph structure-aware index. *Proceedings of the VLDB Endowment*, 18(6):1607–1620, February 2025. CODEN ???? ISSN 2150-8097.

Mohanaraj:2025:PPS

[4085] Abiram Mohanaraj, Matteo Lissandrini, and Katja Hose. PlanRGCN: Predicting SPARQL query performance. *Proceedings of the VLDB Endowment*, 18(6):1621–1634, February 2025. CODEN ???? ISSN 2150-8097.

Davidson:2025:HQA

[4086] Susan B. Davidson, Tova Milo, Kathy Razmadze, and Gal Zeevi. Holistic query approximation via RL modeling. *Proceedings of the VLDB Endowment*, 18(6):1635–1648, February 2025. CODEN ???? ISSN 2150-8097.

Gottesburen:2025:UGP

[4087] Lars Gottesbüren, Laxman Dhulipala, Rajesh Jayaram, and Jakub Łacki. Unleashing graph partitioning for large-scale nearest neighbor search. *Proceedings of the VLDB Endowment*, 18(6):1649–1662, February 2025. CODEN ???? ISSN 2150-8097.

Ma:2025:LEB

[4088] Jiaming Ma, Binwu Wang, Pengkun Wang, Zhengyang Zhou, Xu Wang, and Yang Wang. BiST: a lightweight and efficient bi-directional model for spatiotemporal prediction. *Proceedings of the VLDB Endowment*, 18(6):1663–1676, February 2025. CODEN ???? ISSN 2150-8097.

You:2025:QUD

[4089] Zhengxin You, Qiaomu Shen, Man Lung Yiu, and Bo Tang. QOVIS: Understanding and diagnosing query optimizer via a visualization-assisted approach. *Proceedings of the VLDB Endowment*, 18(6):1677–1690, February 2025. CODEN ???? ISSN 2150-8097.

Jacob:2025:UAD

[4090] Vincent Jacob and Yanlei Diao. Unsupervised anomaly detection in multivariate time series across heterogeneous domains. *Proceedings of the VLDB Endowment*, 18(6):1691–1704, February 2025. CODEN ???? ISSN 2150-8097.

Fu:2025:NSE

[4091] Zhenbo Fu, Xin Ai, Qiange Wang, Yanfeng Zhang, Shizhan Lu, Chaoyi Chen, Chunyu Cao, Hao Yuan, Zhewei Wei, Yu Gu, Yingyou Wen, and Ge Yu. NeutronTask: Scalable and efficient multi-GPU GNN training with task parallelism. *Proceedings of the VLDB Endowment*, 18(6):1705–1719, February 2025. CODEN ???? ISSN 2150-8097.

Hai:2025:QDM

[4092] Rihan Hai, Shih-Han Hung, Tim Coopmans, Tim Littau, and Floris Geerts. Quantum data management in the NISQ era. *Proceedings of the VLDB Endowment*, 18(6):1720–1729, February 2025. CODEN ???? ISSN 2150-8097.

Zheng:2025:GVV

[4093] Yunjia Zheng, Charlotte Sacré, Mohanna Shahrad, Owen Lipchitz, Yu Ting Gu, and Bettina Kemme. G-View: View management for graph databases. *Proceedings of the VLDB Endowment*, 18(6):1730–1742, February 2025. CODEN ???? ISSN 2150-8097.

Du:2025:PFL

[4094] Rong Du, Qingqing Ye, Yue Fu, and Haibo Hu. Privacy for free: Leveraging local differential privacy perturbed data from multiple services. *Proceedings of the VLDB Endowment*, 18(6):1743–1755, February 2025. CODEN ???? ISSN 2150-8097.

Song:2025:KOD

[4095] Haoze Song, Yongqi Wang, Xusheng Chen, Hao Feng, Yazhi Feng, Xieyun Fang, Heming Cui, and Linghe Kong. K2: On optimizing distributed transactions in a multi-region data store with TrueTime clocks. *Proceedings of the VLDB Endowment*, 18(6):1756–1769, February 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:MIP

[4096] Tingyang Chen, Cong Fu, Kun Wang, Xiangyu Ke, Yunjun Gao, Wenchao Zhou, Yabo Ni, and Anxiang Zeng. Maximum inner product is query-scaled nearest neighbor. *Proceedings of the VLDB Endowment*, 18(6):1770–1783, February 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:MFE

[4097] Rongzhao Chen, Xiangpeng Hu, Xiangdong Huang, Chen Wang, Shaoxu Song, and Jianmin Wang. Migration-free elastic storage of time series in Apache IoTDB. *Proceedings of the VLDB Endowment*, 18(6):1784–1797, February 2025. CODEN ???? ISSN 2150-8097.

Gheerbrant:2025:GSP

[4098] Amélie Gheerbrant, Leonid Libkin, Liat Peterfreund, and Alexandra Rogova. GQL and SQL/PGQ: Theoretical models and expressive power. *Proceedings of the VLDB Endowment*, 18(6):1798–1810, February 2025. CODEN ???? ISSN 2150-8097.

Wu:2025:PTG

[4099] Peizhi Wu, Haoshu Xu, Ryan Marcus, and Zachary G. Ives. A practical theory of generalization in selectivity learning. *Proceedings of the VLDB Endowment*, 18(6):1811–1824, February 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:RIC

[4100] Shuo Yang, Jiadong Xie, Yingfan Liu, Jeffrey Xu Yu, Xiyue Gao, Qianru Wang, Yanguo Peng, and Jiangtao Cui. Revisiting the index construction of proximity graph-based approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 18(6):1825–1838, February 2025. CODEN ???? ISSN 2150-8097.

Bei:2025:MPP

[4101] Yijun Bei, Teng Ma, Dongxiang Zhang, Sai Wu, Kian-Lee Tan, and Gang Chen. Mining platoon patterns from traffic videos. *Proceedings of the VLDB Endowment*, 18(6):1839–1851, February 2025. CODEN ???? ISSN 2150-8097.

Huang:2025:ASD

[4102] Botong Huang, Lianggui Weng, Wei Chen, Kai Zeng, Yihui Feng, Bolin Ding, Jingren Zhou, Zuozhi Wang, and Chen Li. Agamotto: Scheduling of deadline-oriented incremental query execution under uncertain resource price. *Proceedings of the VLDB Endowment*, 18(6):1852–1864, February 2025. CODEN ???? ISSN 2150-8097.

Cai:2025:SED

[4103] Baoqing Cai, Yu Liu, Lin Ma, Pingqi Huang, Bingcheng Lian, Ke Zhou, Jia Yuan, Jie Yang, Xiaofan Cai, and Peijun Wu. SCompression: Enhancing database knob tuning efficiency through slice-based OLTP workload compression. *Proceedings of the VLDB Endowment*, 18(6):1865–1878, February 2025. CODEN ???? ISSN 2150-8097.

Gao:2025:FDT

[4104] Xiyue Gao, Zhuang Liu, Yiran Shen, Hui Li, Yingfan Liu, Hongjun Xiao, Yanguo Peng, and Jiangtao Cui. Fucci: Database transaction fuzzing via random conflict construction and multi-level constraint solving. *Proceedings of the VLDB Endowment*, 18(6):1879–1891, February 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:STS

[4105] Wenjing Wang, Ziyang Yue, and Bolong Zheng. Streaming time series subsequence anomaly detection: a glance and focus approach. *Proceedings of the VLDB Endowment*, 18(6):1892–1904, February 2025. CODEN ???? ISSN 2150-8097.

Du:2025:ISE

[4106] Leilei Du, Peng Cheng, Lei Chen, Heng Tao Shen, Xuemin Lin, and Wei Xi. Infinite stream estimation under personalized w-event privacy. *Proceedings of the VLDB Endowment*, 18(6):1905–1918, February 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:GGE

[4107] Meng Wang, Gus Waldspurger, Naufal Ananda, Yuyang Huang, Kemas Wiharja, John Bent, Swaminathan Sundararaman, Vijay Chidambaram, and Haryadi S. Gunawi. GPEmu: a GPU emulator for faster and cheaper prototyping and evaluation of deep learning system research. *Proceedings of the VLDB Endowment*, 18(6):1919–1932, February 2025. CODEN ???? ISSN 2150-8097.

Zeng:2025:CDS

[4108] Anna Zeng, Michael Cafarella, Batya Kenig, Markos Markakis, Brit Youngmann, and Babak Salimi. Causal DAG summarization. *Proceedings of the VLDB Endowment*, 18(6):1933–1947, February 2025. CODEN ???? ISSN 2150-8097.

Ye:2025:MFT

[4109] Zhengmao Ye, Dengchun Li, Zetao Hu, Tingfeng Lan, Jian Sha, Shicong Zhang, Lei Duan, Jie Zuo, Hui Lu, Yuanchun Zhou, and Mingjie Tang. mLoRA: Fine-tuning LoRA adapters via highly-efficient pipeline parallelism in multiple GPUs. *Proceedings of the VLDB Endowment*, 18(6):1948–1961, February 2025. CODEN ???? ISSN 2150-8097.

Kim:2025:ADS

[4110] Abigale Kim, Marco Slot, David G. Andersen, and Andrew Pavlo. Anarchy in the database: a survey and evaluation of database management system extensibility. *Proceedings of the VLDB Endowment*, 18(6):1962–1976, February 2025. CODEN ???? ISSN 2150-8097.

Sun:2025:FFQ

[4111] Longxu Sun, Xin Huang, Jiannan Wang, and Jianliang Xu. A flexible framework for query-oriented interactive community search. *Proceedings of the VLDB Endowment*, 18(6):1977–1990, February 2025. CODEN ???? ISSN 2150-8097.

Yan:2025:TEB

[4112] Ziyi Yan, Mohamed Farouk Drira, Tianxun Hu, and Tianzheng Wang. Tabular: Efficiently building efficient indexes. *Proceedings of the VLDB Endowment*, 18(6):1991–2004, February 2025. CODEN ???? ISSN 2150-8097.

Zeng:2025:EMH

[4113] Yuanyuan Zeng, Yixiang Fang, Kun Chen, Yangfan Li, and Chenhao Ma. Efficient maintenance of 2-hop labeling index on dynamic small-world graphs. *Proceedings of the VLDB Endowment*, 18(7):2005–2017, March 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:VDP

[4114] Kexin Zhu, Michael Whittaker, Srdjan Petrovic, Robert Grandl, and Sanjay Ghemawat. Vive la différence: Practical diff testing of stateful applications. *Proceedings of the VLDB Endowment*, 18(7):2018–2030, March 2025. CODEN ???? ISSN 2150-8097.

Wu:2025:GGR

[4115] Siyue Wu, Dingming Wu, Sinhong Cheuk, Tsz Nam Chan, and Kezhong Lu. GREAT: Generalized reservoir sampling based triangle counting estimation over streaming graphs. *Proceedings of the VLDB Endowment*, 18(7): 2031–2043, March 2025. CODEN ???? ISSN 2150-8097.

Li:2025:EDR

[4116] Mengran Li, Zijing Tan, Honghui Yang, and Shuai Ma. Efficient discovery of relaxed functional dependencies. *Proceedings of the VLDB Endowment*, 18 (7):2044–2056, March 2025. CODEN ???? ISSN 2150-8097.

Hu:2025:STS

[4117] Danlei Hu, Yilin Li, Lu Chen, Ziquan Fang, Yushuai Li, Yunjun Gao, and Tianyi Li. SimRN: Trajectory similarity learning in road networks based on distributed deep reinforcement learning. *Proceedings of the VLDB Endowment*, 18(7):2057–2069, March 2025. CODEN ???? ISSN 2150-8097.

Guo:2025:BNL

[4118] Yuxiang Guo, Zhonghao Hu, Yuren Mao, Baihua Zheng, Yunjun Gao, and Mingwei Zhou. Birdie: Natural language-driven table discovery using differentiate search index. *Proceedings of the VLDB Endowment*, 18(7):2070–2083, March 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:SCO

[4119] Shu Liu, Xiangxi Mo, Moshik Hershcovitch, Henric Zhang, Audrey Cheng, Guy Girmonsky, Gil Vernik, Michael Factor, Tiemo Bang, Soujanya Ponnapalli, Natacha Crooks, Joseph E. Gonzalez, Danny Harnik, and Ion Stoica. SkyStore: Cost-optimized object storage across regions and clouds. *Proceedings of the VLDB Endowment*, 18(7):2084–2096, March 2025. CODEN ???? ISSN 2150-8097.

Ren:2025:PCN

[4120] Tonghui Ren, Chen Ke, Yuankai Fan, Yinan Jing, Zhenying He, Kai Zhang, and X. Sean Wang. The power of constraints in natural language to SQL translation. *Proceedings of the VLDB Endowment*, 18(7):2097–2111, March 2025. CODEN ???? ISSN 2150-8097.

Sheng:2025:ACE

[4121] Yufan Sheng, Xin Cao, Kaiqi Zhao, Yixiang Fang, Jianzhong Qi, Wenjie Zhang, and Christian S. Jensen. ACE: a cardinality estimator for set-valued queries. *Proceedings of the VLDB Endowment*, 18(7):2112–2125, March 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:ABQ

[4122] Xiaoying Wang, Jiannan Wang, Tianzheng Wang, and Yong Zhang. Accio: Bolt-on query federation. *Proceedings of the VLDB Endowment*, 18(7):2126–2135, March 2025. CODEN ???? ISSN 2150-8097.

Dai:2025:FAA

[4123] Xiaohai Dai, Chaozheng Ding, Wei Li, Jiang Xiao, Bolin Zhang, Chen Yu, Albert Y. Zomaya, and Hai Jin. Falcon: Advancing asynchronous BFT consensus for lower latency and enhanced throughput. *Proceedings of the VLDB Endowment*, 18(7):2136–2148, March 2025. CODEN ???? ISSN 2150-8097.

Han:2025:SPT

[4124] Jindong Han, Hao Wang, Hui Xiong, and Hao Liu. Scalable pre-training of compact urban spatio-temporal predictive models on large-scale multi-domain data. *Proceedings of the VLDB Endowment*, 18(7):2149–2158, March 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:HRF

[4125] Xiaoyuan Liu, Ni Trieu, Trinabh Gupta, Ishtiyaque Ahmad, and Dawn Song. HADES: Range-filtered private aggregation on public data. *Proceedings of the VLDB Endowment*, 18(7):2159–2171, March 2025. CODEN ???? ISSN 2150-8097.

Ji:2025:OBP

[4126] Zhaoxuan Ji, Xinlu Wang, Zhaojing Luo, Zhongle Xie, and Meihui Zhang. Optimized batch prompting for cost-effective LLMs. *Proceedings of the VLDB Endowment*, 18(7):2172–2184, March 2025. CODEN ???? ISSN 2150-8097.

Qin:2025:TDH

[4127] Hongchao Qin, Guang Zeng, Rong-Hua Li, Longlong Lin, Ye Yuan, and Guoren Wang. Truss decomposition in hypergraphs. *Proceedings of the VLDB Endowment*, 18(7):2185–2197, March 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:OSS

[4128] Jianting Zhang, Zhongtang Luo, Raghavendra Ramesh, and Aniket Kate. Optimal sharding for scalable blockchains with deconstructed SMR. *Proceedings of the VLDB Endowment*, 18(7):2198–2211, March 2025. CODEN ???? ISSN 2150-8097.

Lai:2025:APH

[4129] Eugenie Y. Lai, Yeye He, and Surajit Chaudhuri. Auto-Prep: Holistic prediction of data preparation steps for self-service business intelligence. *Proceedings of the VLDB Endowment*, 18 (7):2212–2225, March 2025. CODEN ???? ISSN 2150-8097.

Guerrmi:2025:TSM

[4130] Valerio Guerrmi, Thibaut Germain, Charles Truong, Laurent Oudre, and Paul Boniol. Time series motif discovery: a comprehensive evaluation. *Proceedings of the VLDB Endowment*, 18 (7):2226–2239, March 2025. CODEN ???? ISSN 2150-8097.

Bourgeois:2025:EDD

[4131] Daniel Bourgeois, Zhimin Ding, Dimitrije Jankov, Jiehui Li, Mahmoud Sleem, Yuxin Tang, Jiawen Yao, Xinyu Yao, and Chris Jermaine. EinDecomp: Decomposition of declaratively-specified machine learning and numerical computations for parallel execution. *Proceedings of the VLDB Endowment*, 18(7):2240–2253, March 2025. CODEN ???? ISSN 2150-8097.

Wu:2025:CLC

[4132] Ruizhong Wu, Mengxuan Zhang, Shuxin Wang, Frodo Kin Sun Chan, Yan Nei Law, and Lei Li. Continuous lifelong conflict-aware AGV routing with kinematic constraints. *Proceedings of the VLDB Endowment*, 18 (7):2254–2267, March 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:WHE

[4133] Dawei Liu, Bolong Zheng, Ziyang Yue, Fuhao Ruan, Xiaofang Zhou, and Christian S. Jensen. Wolverine: Highly efficient monotonic search path repair for graph-based ANN index updates. *Proceedings of the VLDB Endowment*, 18(7):2268–2280, March 2025. CODEN ???? ISSN 2150-8097.

Song:2025:DSR

[4134] Jiansen Song, Wensheng Dou, Yingying Zheng, Yu Gao, Ziyu Cui, Wei Wang, and Jun Wei. Detecting schema-related logic bugs in relational DBMSs via equivalent database construction. *Proceedings of the VLDB Endowment*, 18(7):2281–2294, March 2025. CODEN ???? ISSN 2150-8097.

Kong:2025:GNM

[4135] Weiyang Kong, Kaiqi Wu, Sen Zhang, and Yubao Liu. GraphSparseNet: a novel method for large scale traffic flow prediction. *Proceedings of the VLDB Endowment*, 18(7):2295–2307, March 2025. CODEN ???? ISSN 2150-8097.

Lai:2025:TFS

[4136] Danling Lai, Jiajie Xu, Jianfeng Qu, Pingfu Chao, Junhua Fang, and Chengfei Liu. TMLKD: Few-shot trajectory metric learning via knowledge distillation. *Proceedings of the VLDB Endowment*, 18(8):2308–2320, April 2025. CODEN ???? ISSN 2150-8097.

Nemoto:2025:ODG

[4137] Jun Nemoto, Takashi Kambayashi, Takashi Hoshino, and Hideyuki Kawashima. Oze: Decentralized graph-based concurrency control for long-running update transactions. *Proceedings of the VLDB Endowment*, 18(8):2321–2333, April 2025. CODEN ???? ISSN 2150-8097.

Milkai:2025:HSR

[4138] Elena Milkai, Xiangyao Yu, and Jignesh M. Patel. Hermes: Off-the-shelf real-time transactional analytics. *Proceedings of the VLDB Endowment*, 18(8):2334–2347, April 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:AFT

[4139] Zeying Zhu, Jonathan Chamberlain, Kenny Wu, David Starobinski, and Zaoxing Liu. Approximation-first time-series query at scale. *Proceedings of the VLDB Endowment*, 18(8):2348–2361, April 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:LFS

[4140] Ziheng Wang, Junyu Wei, Alex Aiken, Guangyan Zhang, Jacob O. Tørring, Rain Jiang, Chenyu Jiang, and Wei Xu. LogCIoud: Fast search of compressed logs on object storage. *Proceedings of the VLDB Endowment*, 18(8):2362–2370, April 2025. CODEN ???? ISSN 2150-8097.

Li:2025:WSP

[4141] Changlun Li, Chenyu Yang, Yuyu Luo, Ju Fan, and Nan Tang. Weak-to-strong prompts with lightweight-to-powerful LLMs for high-accuracy, low-cost, and explainable data transformation. *Proceedings of the VLDB Endowment*, 18(8):2371–2384, April 2025. CODEN ???? ISSN 2150-8097.

Xie:2025:CAT

[4142] Zhe Xie, Zeyan Li, Xiao He, Longlong Xu, Xidao Wen, Tieying Zhang, Jianjun Chen, Rui Shi, and Dan Pei. ChatTS: Aligning time series with LLMs via synthetic data for enhanced understanding and reasoning. *Proceedings of the VLDB Endowment*, 18(8):2385–2398, April 2025. CODEN ???? ISSN 2150-8097.

Cormode:2025:FDD

[4143] Graham Cormode and Daniel Ting. Federated data distribution shift estimation. *Proceedings of the VLDB Endowment*, 18(8):2399–2412, April 2025. CODEN ???? ISSN 2150-8097.

Bekkers:2025:IOA

[4144] Liese Bekkers, Frank Neven, Stijn Vansummeren, and Yisu Remy Wang. Instance-optimal acyclic join processing without regret: Engineering the

Yannakakis algorithm in column stores. *Proceedings of the VLDB Endowment*, 18(8):2413–2426, April 2025. CODEN ???? ISSN 2150-8097.

Thiessen:2025:ALL

[4145] Myles Thiessen, Guy Khazma, Sam Toueg, and Eyal de Lara. Asymmetric linearizable local reads. *Proceedings of the VLDB Endowment*, 18(8):2427–2439, April 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:QVP

[4146] Jinyang Liu, Pu Jiao, Kai Zhao, Xin Liang, Sheng Di, and Franck Cappello. QPET: a versatile and portable quantity-of-interest-preservation framework for error-bounded lossy compression. *Proceedings of the VLDB Endowment*, 18(8):2440–2453, April 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:OUM

[4147] Xinyi Zhu, Yongqi Zhang, and Lei Chen. OpenMEL: Unsupervised multimodal entity linking using noise-free expanded queries and global coherence. *Proceedings of the VLDB Endowment*, 18(8):2454–2467, April 2025. CODEN ???? ISSN 2150-8097.

Ziehn:2025:UIW

[4148] Ariane Ziehn, Jan Szlang, Steffen Zeuch, and Volker Markl. Unraveling the impact of window semantics: Optimizing join order for efficient stream processing. *Proceedings of the VLDB Endowment*, 18(8):2468–2481, April 2025. CODEN ???? ISSN 2150-8097.

Zecchini:2025:DSD

[4149] Luca Zecchini, Vasilis Efthymiou, Felix Naumann, and Giovanni Simonini. Deduplicated sampling on-demand. *Proceedings of the VLDB Endowment*, 18(8):2482–2495, April 2025. CODEN ???? ISSN 2150-8097.

Jendal:2025:LGS

[4150] Theis E. Jendal, Matteo Lissandrini, Peter Dolog, and Katja Hose. The limits of graph samplers for training inductive recommender systems. *Proceedings of the VLDB Endowment*, 18(8):2496–2504, April 2025. CODEN ???? ISSN 2150-8097.

Liang:2025:HTM

[4151] Zhiying Liang, Vahab Jabrayilov, Abutalib Aghayev, and Aleksey Charapko. HoliPaxos: Towards more predictable performance in state machine replication. *Proceedings of the VLDB Endowment*, 18(8):2505–2518, April 2025. CODEN ???? ISSN 2150-8097.

Wu:2025:DAC

[4152] Peizhi Wu, Rong Kang, Tieying Zhang, Jianjun Chen, Ryan Marcus, and Zachary G. Ives. Data-agnostic cardinality learning from imperfect workloads. *Proceedings of the VLDB Endowment*, 18(8):2519–2532, April 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:BMI

[4153] Song Wang, Chen Wang, Jianchun Wang, Shengguo Li, Rui Li, and Zhiyong Peng. BLAEQ: a multigrid index for spatial query on geometry data. *Proceedings of the VLDB Endowment*, 18(8):2533–2546, April 2025. CODEN ???? ISSN 2150-8097.

Cui:2025:STC

[4154] Ziyu Cui, Wensheng Dou, Yu Gao, Rui Yang, Yingying Zheng, Jiansen Song, Yuan Feng, and Jun Wei. Simple testing can expose most critical transaction bugs: Understanding and detecting write-specific serializability violations in database systems. *Proceedings of the VLDB Endowment*, 18(8):2547–2560, April 2025. CODEN ???? ISSN 2150-8097.

Sarpe:2025:EAE

[4155] Ilie Sarpe and Aristides Gionis. Efficient and adaptive estimation of local triadic coefficients. *Proceedings of the VLDB Endowment*, 18(8):2561–2574, April 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:VTG

[4156] Wentao Zhang, Jingyuan Wang, Yifan Yang, and Leong Hou U. VecCity: a taxonomy-guided library for map entity representation learning. *Proceedings of the VLDB Endowment*, 18(8):2575–2588, April 2025. CODEN ???? ISSN 2150-8097.

Mathew:2025:EME

[4157] Jerin George Mathew, Donatella Firmani, and Divesh Srivastava. Evaluating methods for efficient entity count estimation. *Proceedings of the VLDB Endowment*, 18(8):2589–2601, April 2025. CODEN ???? ISSN 2150-8097.

Cheng:2025:FTP

[4158] Audrey Cheng, Aaron Kabcenell, Xiao Shi, Jolene Huey, Peter Bailis, Natacha Crooks, and Ion Stoica. Fair transaction processing for multi-tenant databases. *Proceedings of the VLDB Endowment*, 18(8):2602–2615, April 2025. CODEN ???? ISSN 2150-8097.

Lin:2025:LMT

[4159] Sheng Lin, Fangcheng Fu, Haoyang Li, Hao Ge, Xuanyu Wang, Jiawen Niu, Yaofeng Tu, and Bin Cui. LobRA: Multi-tenant fine-tuning over heterogeneous data. *Proceedings of the VLDB Endowment*, 18(8):2616–2625, April 2025. CODEN ???? ISSN 2150-8097.

Kamali:2025:RPE

[4160] Amin Kamali, Verena Kantere, Calisto Zuzarte, and Vincent Corvinelli. Robust plan evaluation based on approximate probabilistic machine learning. *Proceedings of the VLDB Endowment*, 18(8):2626–2638, April 2025. CODEN ???? ISSN 2150-8097.

Fathollahzadeh:2025:CDC

[4161] Saeed Fathollahzadeh, Essam Mansour, and Matthias Boehm. CatDB: Data-catalog-guided, LLM-based generation of data-centric ML pipelines. *Proceedings of the VLDB Endowment*, 18(8):2639–2652, April 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:CPV

[4162] Hanwen Liu, Shashank Giridhara, and Ibrahim Sabek. Conformal prediction for verifiable learned query optimization. *Proceedings of the VLDB Endowment*, 18(8):2653–2666, April 2025. CODEN ???? ISSN 2150-8097.

Makhija:2025:ILP

[4163] Neha Makhija and Wolfgang Gatterbauer. Is integer linear programming all you need for deletion propagation? A unified and practical approach for generalized deletion propagation. *Proceedings of the VLDB Endowment*, 18

(8):2667–2680, April 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:MCS

[4164] Yurong Liu, Eduardo H. M. Pena, Aécio Santos, Eden Wu, and Juliana Freire. Magneto: Combining small and large language models for schema matching. *Proceedings of the VLDB Endowment*, 18(8):2681–2694, April 2025. CODEN ???? ISSN 2150-8097.

Guo:2025:EAS

[4165] Qiuyu Guo, Jianye Yang, Wenjie Zhang, Hanchen Wang, Ying Zhang, and Xuemin Lin. Efficient and accurate subgraph counting: a bottom-up flow-learning based approach. *Proceedings of the VLDB Endowment*, 18(8): 2695–2708, April 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:ARQ

[4166] Lixiang Chen, Yuxing Han, Yu Chen, Xing Chen, Chengcheng Yang, and Weining Qian. AQETuner: Reliable query-level configuration tuning for analytical query engines. *Proceedings of the VLDB Endowment*, 18(8):2709–2721, April 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:PNZ

[4167] Jun Liu, Bingqian Du, Ziyue Luo, Sitian Lu, Qiankun Zhang, and Hai Jin. PipeTGL: (near) zero bubble memory-based temporal graph neural network training via pipeline optimization. *Proceedings of the VLDB Endowment*, 18 (8):2722–2734, April 2025. CODEN ???? ISSN 2150-8097.

Chung:2025:LCA

[4168] Yeounoh Chung, Gaurav T. Kakkar, Yu Gan, Brenton Milne, and Fatma Özcan. Is long context all you need? leveraging LLM's extended context for NL2SQL. *Proceedings of the VLDB Endowment*, 18(8):2735–2747, April 2025. CODEN ???? ISSN 2150-8097.

Kuiper:2025:SPH

[4169] Laurens Kuiper, Paul Groß, Peter Boncz, and Hannes Mühleisen. Saving private hash join. *Proceedings of the VLDB Endowment*, 18(8):2748–2760, April 2025. CODEN ???? ISSN 2150-8097.

Zhou:2025:CCS

[4170] Weixing Zhou, Yanfeng Zhang, Xinji Zhou, Zhiyou Wang, Zeshun Peng, Yang Ren, Sihao Li, Huanchen Zhang, Guoliang Li, and Ge Yu. Concurrency control as a service. *Proceedings of the VLDB Endowment*, 18(9):2761–2774, May 2025. CODEN ???? ISSN 2150-8097.

Qiu:2025:TUB

[4171] Xiangfei Qiu, Zhe Li, Wanghui Qiu, Shiyan Hu, Lekui Zhou, Xingjian Wu, Zhengyu Li, Chenjuan Guo, Aoying Zhou, Zhenli Sheng, Jilin Hu, Christian S. Jensen, and Bin Yang. TAB: Unified benchmarking of time series anomaly detection methods. *Proceedings of the VLDB Endowment*, 18(9): 2775–2789, May 2025. CODEN ???? ISSN 2150-8097.

Zhong:2025:HDT

[4172] Yuchen Zhong, Junwei Su, Chuan Wu, and Minjie Wang. Heta: Distributed training of heterogeneous graph neural networks. *Proceedings of the*

VLDB Endowment, 18(9):2790–2803, May 2025. CODEN ???? ISSN 2150-8097.

Foufoulas:2025:UBG

[4173] Yannis Foufoulas, Theoni Palaiologou, and Alkis Simitsis. The UDFBENCH benchmark for general-purpose UDF queries. *Proceedings of the VLDB Endowment*, 18(9):2804–2817, May 2025. CODEN ???? ISSN 2150-8097.

Sun:2025:EEK

[4174] Ye Sun, Lei Shi, and Yongxin Tong. eX-path: Explaining knowledge graph link prediction with ontological closed path rules. *Proceedings of the VLDB Endowment*, 18(9):2818–2830, May 2025. CODEN ???? ISSN 2150-8097.

Katsarakis:2025:LTL

[4175] Antonios Katsarakis, Vasilis Gavrielatos, Emmanouil Giortamis, Pramod Bhatotia, Aleksandar Dragojevic, Boris Grot, Vijay Nagarajan, and Panagiota Fatourou. The LAW theorem: Local reads and linearizable asynchronous replication. *Proceedings of the VLDB Endowment*, 18(9):2831–2845, May 2025. CODEN ???? ISSN 2150-8097.

Vandevoort:2025:URP

[4176] Brecht Vandevoort, Alan Fekete, Bas Ketsman, Frank Neven, and Stijn Vansummeren. Using read promotion and mixed isolation levels for performant yet serializable execution of transaction programs. *Proceedings of the VLDB Endowment*, 18(9):2846–2858, May 2025. CODEN ???? ISSN 2150-8097.

Korkmaz:2025:LAC

[4177] Zeynep Korkmaz, M. Tamer Özsu, and Khuzaima Daudjee. Locality-aware cache replacement policy for graph traversals. *Proceedings of the VLDB Endowment*, 18(9):2859–2871, May 2025. CODEN ???? ISSN 2150-8097.

Adao:2025:KCD

[4178] Rúben Adão, Zhongjie Wu, Changjun Zhou, Oana Balmau, João Paulo, and Ricardo Macedo. KEIGO: Co-designing log-structured merge key-value stores with a non-volatile, concurrency-aware storage hierarchy. *Proceedings of the VLDB Endowment*, 18(9):2872–2885, May 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:WLI

[4179] Qiyu Liu, Siyuan Han, Yanlin Qi, Jingshu Peng, Jin Li, Longlong Lin, and Lei Chen. Why are learned indexes so effective but sometimes ineffective? *Proceedings of the VLDB Endowment*, 18(9):2886–2898, May 2025. CODEN ???? ISSN 2150-8097.

Khan:2025:SMS

[4180] Falaah Arif Khan, Denys Herasymuk, Nazar Protsiv, and Julia Stoyanovich. Still more shades of null: an evaluation suite for responsible missing value imputation. *Proceedings of the VLDB Endowment*, 18(9):2899–2913, May 2025. CODEN ???? ISSN 2150-8097.

Cong:2025:OPM

[4181] Tianji Cong, Fatemeh Nargesian, Junjie Xing, and H. V. Jagadish. OpenForge: Probabilistic metadata integration. *Proceedings of the VLDB Endow-*

ment, 18(9):2914–2927, May 2025. CODEN ???? ISSN 2150-8097.

Ahmad:2025:MPF

[4182] Akhlaque Ahmad, Da Yan, Xiao Chen, Lyuheng Yuan, Qin Zhang, and Saugat Adhikari. Maximum k-plex finding: Choices of pruning techniques matter! *Proceedings of the VLDB Endowment*, 18(9):2928–2940, May 2025. CODEN ???? ISSN 2150-8097.

Gou:2025:CSE

[4183] Xiaoxuan Gou, Weiguo Zheng, Yuxiang Wang, Xiaoliang Xu, and Zhiyuan Yu. A comprehensive survey and experimental study of learning-based community search. *Proceedings of the VLDB Endowment*, 18(9):2941–2954, May 2025. CODEN ???? ISSN 2150-8097.

Lu:2025:DAS

[4184] Weizheng Lu, Chao Hui, Yunhai Wang, Feng Zhang, Yueguo Chen, Bao Liu, Chengjie Li, Zhaoxin Wu, and Xuye Qin. Decentralized actor scheduling and reference-based storage in xorbits: a native scalable data science engine. *Proceedings of the VLDB Endowment*, 18(9):2955–2963, May 2025. CODEN ???? ISSN 2150-8097.

Kong:2025:SES

[4185] Tao Kong, Hui Li, Yuxuan Zhao, Liping Li, Xiyue Gao, Qilong Wu, and Jiangtao Cui. STsCache: an efficient semantic caching scheme for time-series data workloads based on hybrid storage. *Proceedings of the VLDB Endowment*, 18(9):2964–2977, May 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:CCD

[4186] Ruihong Wang, Jianguo Wang, and Walid G. Aref. Cache coherence over disaggregated memory. *Proceedings of the VLDB Endowment*, 18(9):2978–2991, May 2025. CODEN ???? ISSN 2150-8097.

Bhoot:2025:TSS

[4187] Ruchi Bhoot, Tuhin Khare, Manoj Agarwal, Siddharth Jaiswal, and Yogesh Simmhan. Triparts: Scalable streaming graph partitioning to enhance community structure. *Proceedings of the VLDB Endowment*, 18(9):2992–3006, May 2025. CODEN ???? ISSN 2150-8097.

Qi:2025:LFB

[4188] Shipeng Qi, Bing Tong, Jiatao Hu, Heng Lin, Yue Pang, Wei Yuan, Songlin Lyu, Zhihui Guo, Ke Huang, Xujin Ba, Qiang Yin, Youren Shen, Yan Zhou, Tao Lv, Jia Li, Lei Zou, Yongwei Wu, Gábor Szárnyas, Xiaowei Zhu, Wenguang Chen, and Chuntao Hong. The LDBC financial benchmark: Transaction workload. *Proceedings of the VLDB Endowment*, 18(9):3007–3020, May 2025. CODEN ???? ISSN 2150-8097.

Sohn:2025:AQO

[4189] Donghyun Sohn, Kelly Jiang, Nicolas Hammer, and Jennie Rogers. Alchemy: a query optimization framework for oblivious SQL. *Proceedings of the VLDB Endowment*, 18(9):3021–3034, May 2025. CODEN ???? ISSN 2150-8097.

Shankar:2025:DAQ

[4190] Shreya Shankar, Tristan Chambers, Tarak Shah, Aditya G. Parameswaran, and Eugene Wu. DocETL: Agentic query rewriting and evaluation for complex document processing. *Proceedings of the VLDB Endowment*, 18(9):3035–3048, May 2025. CODEN ???? ISSN 2150-8097.

Hu:2025:HSV

[4191] Guoyu Hu, Shaofeng Cai, Tien Tuan Anh Dinh, Zhongle Xie, Cong Yue, Gang Chen, and Beng Chin Ooi. HAKES: Scalable vector database for embedding search service. *Proceedings of the VLDB Endowment*, 18(9):3049–3062, May 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:PCC

[4192] Zhengdong Wang, Qiang Yin, and Longbin Lai. Path-centric cardinality estimation for subgraph matching. *Proceedings of the VLDB Endowment*, 18(9):3063–3076, May 2025. CODEN ???? ISSN 2150-8097.

Lin:2025:CSS

[4193] Hong Lin, Shixin Wan, Zhongle Xie, Ke Chen, Meihui Zhang, Lidan Shou, and Gang Chen. A comprehensive study of Shapley value in data analytics. *Proceedings of the VLDB Endowment*, 18(9):3077–3092, May 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:EED

[4194] Longjiao Zhang, Rui Wang, Tongya Zheng, Ziqi Huang, Wenjie Huang, Xinyu Wang, Can Wang, Mingli Song, Sai Wu, and Shuibing He. Effective and efficient distributed temporal graph learning through hotspot memory sharing. *Proceedings of the VLDB Endowment*, 18(9):3093–3105, May 2025. CODEN ???? ISSN 2150-8097.

Haque:2025:SSS

[4195] Riddho R. Haque, Anh L. Mai, Matteo Brucato, Azza Abouzied, Peter J. Haas, and Alexandra Meliou. Stochastic SketchRefine: Scaling in-database decision-making under uncertainty to millions of tuples. *Proceedings of the VLDB Endowment*, 18(9):3106–3118, May 2025. CODEN ???? ISSN 2150-8097.

Weisgut:2025:CMP

[4196] Marcel Weisgut, Daniel Ritter, Pinar Tözün, Lawrence Benson, and Tilmann Rabl. CXL memory performance for in-memory data processing. *Proceedings of the VLDB Endowment*, 18(9):3119–3133, May 2025. CODEN ???? ISSN 2150-8097.

Teng:2025:LAL

[4197] Fei Teng, Haoyang Li, and Lei Chen. LLMLog: Advanced log template generation via LLM-Driven multi-round annotation. *Proceedings of the VLDB Endowment*, 18(9):3134–3148, May 2025. CODEN ???? ISSN 2150-8097.

Ngo:2025:CHK

[4198] Vinh Quang Ngo and Marina Papatriantafilou. Cuckoo heavy keeper and the balancing act of maintaining heavy hitters in stream processing. *Proceedings of the VLDB Endowment*, 18(9):3149–3161, May 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:RRC

[4199] Qian Zhang, Yiwen Xiang, Jianhao Wei, Yang Yang, Yifan Li, Xueqing Gong, and Wanggen Liu. Rebirth-Retire: a concurrency control protocol adaptable to different levels of contention. *Proceedings of the VLDB Endowment*, 18(9):3162–3174, May 2025. CODEN ???? ISSN 2150-8097.

Li:2025:UMI

[4200] Ruikun Li, Dai Shi, Ye Xiao, and Junbin Gao. UFGTime: Mining intertwined dependencies in multivariate time series via an efficient pure graph approach. *Proceedings of the VLDB Endowment*, 18(9):3175–3188, May 2025. CODEN ???? ISSN 2150-8097.

Jiang:2025:AOH

[4201] Ruochen Jiang and Spyros Blanas. ArrayMorph: Optimizing hyperslab queries on the cloud for machine learning pipelines. *Proceedings of the VLDB Endowment*, 18(9):3189–3202, May 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:IFG

[4202] Yangxin Fan, Haolai Che, and Yinghui Wu. Inference-friendly graph compression for graph neural networks. *Proceedings of the VLDB Endowment*, 18 (9):3203–3215, May 2025. CODEN ???? ISSN 2150-8097.

Talluri:2025:GHP

[4203] Sacheendra Talluri, Guido Walter Di Donato, Luca Danelutti, Koen R. Vlaswinkel, Marco Arnaboldi, Arnaud Delamare, Marco D. Santambrogio, and Daniele Bonetta. GpJSON: High-performance JSON data processing on GPUs. *Proceedings of the VLDB Endowment*, 18(9):3216–3229, May 2025. CODEN ???? ISSN 2150-8097.

Ferrara:2025:BSP

[4204] Antonio Ferrara, David García-Soriano, and Francesco Bonchi. Beyond shortest paths: Node fairness in route recommendation. *Proceedings of the VLDB Endowment*, 18(9):3230–3242, May 2025. CODEN ???? ISSN 2150-8097.

Li:2025:ACI

[4205] Yin Li, Sharad Mehrotra, Shantanu Sharma, and Komal Kumari. Access control for information-theoretically secure data. *Proceedings of the VLDB Endowment*, 18(10):3243–3255, June 2025. CODEN ???? ISSN 2150-8097.

Peng:2025:DRF

[4206] Zhencan Peng, Miao Qiao, Wenchao Zhou, Feifei Li, and Dong Deng. Dynamic range-filtering approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 18(10):3256–3268, June 2025. CODEN ???? ISSN 2150-8097.

Cao:2025:LGM

[4207] Yukun Cao, Zengyi Gao, Zhiyang Li, Xike Xie, S. Kevin Zhou, and Jianliang Xu. LEGO-GraphRAG: Modularizing graph-based retrieval-augmented generation for design space exploration. *Proceedings of the VLDB Endowment*, 18(10):3269–3283, June 2025. CODEN ???? ISSN 2150-8097.

Hwang:2025:DVE

[4208] Jinwoo Hwang, Daeun Kim, Sangyeop Lee, Yoonsung Kim, Guseul Heo, Hojoon Kim, Yunseok Jeong, Tadiwos Meaza, Eunhyeok Park, Jeongseob Ahn, and Jongse Park. Déjà Vu: Efficient video-language query engine with learning-based inter-frame computation reuse. *Proceedings of the VLDB Endowment*, 18(10):3284–3298, June 2025. CODEN ???? ISSN 2150-8097.

Stoian:2025:PSP

[4209] Mihail Stoian, Andreas Zimmerer, Skander Krid, Amadou Latyr Ngom, Jialin Ding, Tim Kraska, and Andreas Kipf. Parachute: Single-pass bi-directional information passing. *Proceedings of the VLDB Endowment*, 18 (10):3299–3311, June 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:TTC

[4210] Jiani Yang, Sai Wu, Yong Wang, Dongxiang Zhang, Yifei Liu, Xiu Tang, and Gang Chen. Twisted twin: a collaborative and competitive memory management approach in HTAP systems. *Proceedings of the VLDB Endowment*, 18(10):3312–3325, June 2025. CODEN ???? ISSN 2150-8097.

Farhan:2025:CMH

[4211] Muhammad Farhan, Henning Koehler, Qing Wang, Jiawen Wang, Moritz Laupichler, and Peter Sanders. Customization meets 2-hop labeling: Efficient routing in road networks. *Proceedings of the VLDB Endowment*, 18(10): 3326–3338, June 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:XBM

[4212] Dayi Fan, Rubao Lee, and Xiaodong Zhang. X-Blossom: Massive parallelization of graph maximum matching. *Proceedings of the VLDB Endowment*, 18(10):3339–3353, June 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:DIL

[4213] Chenyu Yang, Yuyu Luo, Chuanxuan Cui, Ju Fan, Chengliang Chai, and Nan Tang. Data imputation with limited data redundancy using data lakes. *Proceedings of the VLDB Endowment*, 18 (10):3354–3367, June 2025. CODEN ???? ISSN 2150-8097.

Huang:2025:CMO

[4214] Chunyue Huang, Shuang Liu, Xinyi Zhang, Wenhao Li, Wei Lu, and Xiaoyong Du. Chimera: Mitigating ownership transfers in multi-primary shared-storage cloud-native databases. *Proceedings of the VLDB Endowment*, 18 (10):3368–3381, June 2025. CODEN ???? ISSN 2150-8097.

Xu:2025:STA

[4215] Minze Xu, Zhentai Xie, Zhibin Wang, Guangzhan Wang, Longbin Lai, Yuan Zhang, Chen Tian, and Sheng Zhong. Sectric: Towards accurate, privacy-preserving and efficient triangle counting. *Proceedings of the VLDB Endowment*, 18(10):3382–3395, June 2025. CODEN ???? ISSN 2150-8097.

Li:2025:WSM

[4216] Haoyang Li, Yuming Xu, Yiming Li, Hanmo Liu, Darian Li, Chen Jason Zhang, Lei Chen, and Qing Li. When speed meets accuracy: an efficient and effective graph model for temporal link prediction. *Proceedings of the VLDB Endowment*, 18(10):3396–3405, June 2025. CODEN ???? ISSN 2150-8097.

Tang:2025:ITS

[4217] Yuxin Tang, Feng Zhang, Jiawei Guan, Yuan Tian, Xiangdong Huang, Chen Wang, Jianmin Wang, and Xiaoyong Du. Improving time series data compression in Apache IoTDB. *Proceedings of the VLDB Endowment*, 18(10):3406–

3420, June 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:LEM

[4218] Jianwei Wang, Kai Wang, Ying Zhang, Wenjie Zhang, Xiwei Xu, and Xuemin Lin. On LLM-enhanced mixed-type data imputation with high-order message passing. *Proceedings of the VLDB Endowment*, 18(10):3421–3434, June 2025. CODEN ???? ISSN 2150-8097.

Chakraborty:2025:MDE

[4219] Vishal Chakraborty, Youri Kaminsky, Sharad Mehrotra, Felix Naumann, Faisal Nawab, Primal Pappachan, Mohammad Sadoghi, and Nalini Venkatasubramanian. Meaningful data erasure in the presence of dependencies. *Proceedings of the VLDB Endowment*, 18 (10):3435–3448, June 2025. CODEN ???? ISSN 2150-8097.

Tang:2025:SMD

[4220] Chuzhe Tang, Zhaoguo Wang, Jinyang Li, and Haibo Chen. Sonata: Multi-database transactions made fast and serializable. *Proceedings of the VLDB Endowment*, 18(10):3449–3462, June 2025. CODEN ???? ISSN 2150-8097.

Ceccarello:2025:MSM

[4221] Matteo Ceccarello, Francesco Pio Monaco, and Francesco Silvestri. MOMENTI: Scalable motif mining in multidimensional time series. *Proceedings of the VLDB Endowment*, 18(10):3463–3476, June 2025. CODEN ???? ISSN 2150-8097.

Martin:2025:HWF

[4222] Albert Martin, Eduardo C. de Almeida, Oscar Romero, and Anna Queralt. How and why false denial constraints are discovered. *Proceedings of the VLDB Endowment*, 18(10):3477–3489, June 2025. CODEN ???? ISSN 2150-8097.

Zhou:2025:ECD

[4223] Yingli Zhou, Qingshuo Guo, and Yixiang Fang. Efficient k-clique densest subgraph discovery: Towards bridging practice and theory. *Proceedings of the VLDB Endowment*, 18(10):3490–3503, June 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:ANL

[4224] Meihao Fan, Ju Fan, Nan Tang, Lei Cao, Guoliang Li, and Xiaoyong Du. AutoPrep: Natural language question-aware data preparation with a multi-agent framework. *Proceedings of the VLDB Endowment*, 18(10):3504–3517, June 2025. CODEN ???? ISSN 2150-8097.

Gong:2025:AAN

[4225] Zengyang Gong, Yuxiang Zeng, and Lei Chen. Accelerating approximate nearest neighbor search in hierarchical graphs: Efficient level navigation with shortcuts. *Proceedings of the VLDB Endowment*, 18(10):3518–3530, June 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:FIT

[4226] Yan Zhang, Shuwei Liang, Xiaoye Miao, Yangyang Wu, and Jianwei Yin. Federated incomplete tabular data prediction with missing complementarity. *Proceedings of the VLDB Endowment*, 18(10):3531–3544, June 2025. CODEN ???? ISSN 2150-8097.

Hu:2025:LTS

[4227] Yihao Hu, Jin Wang, and Sajjadur Rahman. LakeVisage: Towards scalable, flexible and interactive visualization recommendation for data discovery over data lakes. *Proceedings of the VLDB Endowment*, 18(10):3545–3558, June 2025. CODEN ???? ISSN 2150-8097.

Zhou:2025:PMA

[4228] Xiaokai Zhou, Xiao Yan, Fangcheng Fu, Ziwen Fu, Tieyun Qian, Yuanyuan Zhu, Qinbo Zhang, Bin Cui, and Jiawei Jiang. PS-MI: Accurate, efficient, and private data valuation in vertical federated learning. *Proceedings of the VLDB Endowment*, 18(10):3559–3572, June 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:TPA

[4229] Jiasheng Zhang, Deqiang Ouyang, Shuang Liang, and Jie Shao. Towards pattern-aware data augmentation for temporal knowledge graph completion. *Proceedings of the VLDB Endowment*, 18(10):3573–3586, June 2025. CODEN ???? ISSN 2150-8097.

Hao:2025:RED

[4230] Chiyu Hao, Jixian Su, Shixuan Sun, Hao Zhang, Sen Gao, Jianwen Zhao, Chenyi Zhang, Jieru Zhao, Chen Chen, and Minyi Guo. RapidStore: an efficient dynamic graph storage system for concurrent queries. *Proceedings of the VLDB Endowment*, 18(10):3587–3600, June 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:GGO

[4231] Xiaoyu Fan, Kun Chen, Jiping Yu, Xiaowei Zhu, Yunyi Chen, Huanchen Zhang, and Wei Xu. GORAM: Graph-oriented ORAM for efficient ego-centric queries on federated graphs. *Proceedings of the VLDB Endowment*, 18(10): 3601–3614, June 2025. CODEN ???? ISSN 2150-8097.

Sun:2025:AAQ

[4232] Weijie Sun, Zihuan Xu, Wangze Ni, Lei Chen, Peng Cheng, and Chen Jason Zhang. Authenticated aggregate queries with Boolean range predicates on blockchains. *Proceedings of the VLDB Endowment*, 18(10):3615–3627, June 2025. CODEN ???? ISSN 2150-8097.

Chao:2025:FFI

[4233] Zemin Chao, Qiaoyi Zheng, Zhixin Qi, and Hongzhi Wang. FSMDTW: a fast index-free subsequence matching algorithm for dynamic time warping. *Proceedings of the VLDB Endowment*, 18 (10):3628–3640, June 2025. CODEN ???? ISSN 2150-8097.

Tang:2025:FGW

[4234] Jianheng Tang, Xi Zhao, Lemin Kong, Xiaofang Zhou, and Jia Li. Fused Gromov-Wasserstein alignment for graph edit distance computation and beyond. *Proceedings of the VLDB Endowment*, 18(10):3641–3654, June 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:ETT

[4235] Tianshu Zhang, Kun Qian, Siddhartha Sahai, Yuan Tian, Shaddy Garg, Huan Sun, and Yunyao Li. Evoschema: Towards text-to-SQL robustness against schema evolution. *Proceedings of the VLDB Endowment*, 18(10):3655–3668, June 2025. CODEN ???? ISSN 2150-8097.

Han:2025:EEC

[4236] Shuai Han, Yushi Tao, Jingwen Tan, Huanran Wang, Wu Yang, and Yanmei Wang. Effective and efficient community search for complex network semantics capture: From coarse-grain to fine-grain. *Proceedings of the VLDB Endowment*, 18(10):3669–3681, June 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:HWD

[4237] Rongrong Zhang, Zhiwei Ye, Jun-Peng Zhu, Peng Cai, Xuan Zhou, Dunbo Cai, and Ling Qian. HAWK: a workload-driven hierarchical deadlock detection approach in distributed database system. *Proceedings of the VLDB Endowment*, 18(10):3682–3694, June 2025. CODEN ???? ISSN 2150-8097.

Chai:2025:DBA

[4238] Chengliang Chai, Jiajun Li, Yuhao Deng, Yuanhao Zhong, Ye Yuan, Guoren Wang, and Lei Cao. Doctopus: Budget-aware structural table extraction from unstructured documents. *Proceedings of the VLDB Endowment*, 18(11):3695–3707, July 2025. CODEN ???? ISSN 2150-8097.

Wen:2025:ESS

[4239] Qi Wen, Yutong Ye, Xiang Lian, and Mingsong Chen. S3AND: Efficient subgraph similarity search under aggregated neighbor difference semantics. *Proceedings of the VLDB Endowment*, 18(11):3708–3720, July 2025. CODEN ???? ISSN 2150-8097.

Zheng:2025:LXE

[4240] Yanping Zheng, Zhewei Wei, Frank de Hoog, Xu Chen, Hongteng Xu, Yuhang Ye, and Jiadeng Huang. Lighter-X: an efficient and plug-and-play strategy for graph-based recommendation through decoupled propagation. *Proceedings of the VLDB Endowment*, 18(11):3721–3729, July 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:SES

[4241] Qiyu Liu, Yanlin Qi, Siyuan Han, Jingshu Peng, Jin Li, and Lei Chen. Not small enough? SegPQ: a learned approach to compress product quantization codebooks. *Proceedings of the VLDB Endowment*, 18(11):3730–3743, July 2025. CODEN ???? ISSN 2150-8097.

Rashedi:2025:ACE

[4242] Nazanin Rashedi and Guido Moerkotte. The accuracy of cardinality estimators: Unraveling the evaluation result conundrum. *Proceedings of the VLDB Endowment*, 18(11):3744–3756, July 2025. CODEN ???? ISSN 2150-8097.

Tang:2025:LLP

[4243] Benzhao Tang, Shiyu Yang, Zhitao Shen, Wenjie Zhang, Xuemin Lin, and Zhihong Tian. LogLite: Lightweight plug-and-play streaming log compression. *Proceedings of the VLDB Endowment*, 18(11):3757–3770, July 2025. CODEN ???? ISSN 2150-8097.

Tsegai:2025:EEA

[4244] Saimon Amanuel Tsegai, Xinyu Yang, Haoyuan Liu, and Peng Gao. Enabling efficient attack investigation via human-in-the-loop security analysis. *Proceedings of the VLDB Endowment*, 18(11):3771–3783, July 2025. CODEN ???? ISSN 2150-8097.

Fu:2025:STI

[4245] Wenzhi Fu and Yang Cao. Shifting transaction isolation on graphs: From systems to data. *Proceedings of the VLDB Endowment*, 18(11):3784–3796, July 2025. CODEN ???? ISSN 2150-8097.

Jiang:2025:FGV

[4246] Wenqi Jiang, Hang Hu, Torsten Hoefler, and Gustavo Alonso. Fast graph vector search via hardware acceleration and delayed-synchronization traversal. *Proceedings of the VLDB Endowment*, 18(11):3797–3811, July 2025. CODEN ???? ISSN 2150-8097.

Ye:2025:FLE

[4247] Hengyu Ye, Jiadong Chen, Fuxin Jiang, Xiao He, Tieying Zhang, Jianjun Chen, and Xiaofeng Gao. Fremer: Lightweight and effective frequency transformer for workload forecasting in cloud services. *Proceedings of the VLDB Endowment*, 18(11):3812–3825, July 2025. CODEN ???? ISSN 2150-8097.

Nobari:2025:TLL

[4248] Arash Dargahi Nobari and Davood Rafiei. TabulaX: Leveraging large language models for multi-class table transformations. *Proceedings of the VLDB Endowment*, 18(11):3826–3839, July 2025. CODEN ???? ISSN 2150-8097.

Cui:2025:BLT

[4249] Fan Cui, Eric Lo, Srijan Srivastava, and Ziliang Lai. Bonspiel: Low tail latency transactions in geo-distributed databases. *Proceedings of the VLDB Endowment*, 18(11):3840–3853, July 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:EGD

[4250] Qiange Wang, Yongze Yan, Hongshi Tan, Cheng Chen, Cheng Zhao, Jiaming Tian, Jiaxin Jiang, Xiaoliang Cong, Yanfeng Zhang, Ge Yu, Weng-Fai Wong, and Bingsheng He. Efficient graph data access for out-of-memory GPU streaming graph processing. *Proceedings of the VLDB Endowment*, 18 (11):3854–3867, July 2025. CODEN ???? ISSN 2150-8097.

Schmitt:2025:ERE

[4251] Daniel Schmitt, Thomas Hütter, and Nikolaus Augsten. Extensible and robust evaluation of similarity queries. *Proceedings of the VLDB Endowment*, 18(11):3868–3882, July 2025. CODEN ???? ISSN 2150-8097.

Zhou:2025:PWS

[4252] Yan Zhou, Chunwei Liu, Bhuvan Urgaonkar, Zhengle Wang, Magnus Mueller, Chao Zhang, Songyue Zhang, Pascal Pfeil, Dominik Horn, Zhengchun Liu, Davide Pagano, Tim Kraska, Samuel Madden, and Ju Fan. PBench: Workload synthesizer with real statistics for cloud analytics benchmarking. *Proceedings of the VLDB Endowment*, 18(11):3883–3895, July 2025. CODEN ???? ISSN 2150-8097.

Lu:2025:ASM

[4253] Yujie Lu, Zhijie Zhang, Weiguo Zheng, and Lei Zou. Accelerating subgraph matching through fine-grained and powerful equivalences. *Proceedings of the VLDB Endowment*, 18(11):3896–3909, July 2025. CODEN ???? ISSN 2150-8097.

Gretscher:2025:HOS

[4254] Luca Gretscher and Jens Dittrich. How to optimize SQL queries? A comparison between split, holistic, and hybrid approaches. *Proceedings of the VLDB Endowment*, 18(11):3910–3922, July 2025. CODEN ???? ISSN 2150-8097.

Eslami:2025:DDR

[4255] Navid Eslami, Ioana O. Bercea, and Niv Dayan. Diva: Dynamic range filter for var-length keys and queries. *Proceedings of the VLDB Endowment*, 18 (11):3923–3936, July 2025. CODEN ???? ISSN 2150-8097.

Becchetti:2025:AHN

[4256] Luca Becchetti, Andrea Clementi, Luciano Guալá, Luca Pepè Sciarria, Alessandro Straziota, and Matteo Stromieri. Approximate 2-hop neighborhoods on incremental graphs: an efficient lazy approach. *Proceedings of the VLDB Endowment*, 18(11):3937–3950, July 2025. CODEN ???? ISSN 2150-8097.

Mageirakos:2025:CVS

[4257] Vasilis Mageirakos, Bowen Wu, and Gustavo Alonso. Cracking vector search indexes. *Proceedings of the VLDB Endowment*, 18(11):3951–3964, July 2025. CODEN ???? ISSN 2150-8097.

Heidari:2025:DDO

[4258] Alireza Heidari, Amirhossein Ahmadi, and Wei Zhang. DobLIX: a dual-objective learned index for log-structured merge trees. *Proceedings of the VLDB Endowment*, 18(11):3965–3978, July 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:CMC

[4259] Xuhang Zhu, Xiu Tang, Sai Wu, Jichen Li, Haobo Wang, Chang Yao, Quanqing Xu, and Gang Chen. CoLA: Model collaboration for log-based anomaly detection. *Proceedings of the VLDB Endowment*, 18(11):3979–3987, July 2025. CODEN ???? ISSN 2150-8097.

Jungmair:2025:TDF

[4260] Michael Jungmair and Jana Giceva. Towards designing future-proof data processing systems. *Proceedings of the VLDB Endowment*, 18(11):3988–3995, July 2025. CODEN ???? ISSN 2150-8097.

Abramovich:2025:AFA

[4261] Omer Abramovich, Daniel Deutch, Nave Frost, Ahmet Kara, and Dan Olteanu. Advancing fact attribution for query answering: Aggregate queries and novel algorithms. *Proceedings of the VLDB Endowment*, 18(11):3996–4008, July 2025. CODEN ???? ISSN 2150-8097.

Pachera:2025:WIC

[4262] Amedeo Pachera, Mattia Palmiotto, Angela Bonifati, and Andrea Mauri. What if: Causal analysis with graph databases. *Proceedings of the VLDB Endowment*, 18(11):4009–4016, July 2025. CODEN ???? ISSN 2150-8097.

Gienieczko:2025:AFS

[4263] Mateusz Gienieczko, Maximilian Kuschewski, Thomas Neumann, Viktor Leis, and Jana Giceva. AnyBlox: a framework for self-decoding datasets. *Proceedings of the VLDB Endowment*, 18(11):4017–4031, July 2025. CODEN ???? ISSN 2150-8097.

Ji:2025:FBC

[4264] Yushuai Ji, Shengkun Zhu, Shixun Huang, Zepeng Liu, Sheng Wang, and Zhiyong Peng. Federated and balanced clustering for high-dimensional data. *Proceedings of the VLDB Endowment*, 18(11):4032–4044, July 2025. CODEN ???? ISSN 2150-8097.

Hafidi:2025:RDM

[4265] Mohamed Sabri Hafidi, Ozan Kahramanoğulları, Anton Dignös, and Johann Gamper. Relational data models for genetic VCF data. *Proceedings of the VLDB Endowment*, 18(11):4045–4053, July 2025. CODEN ???? ISSN 2150-8097.

Giannoulidis:2025:BRC

[4266] Apostolos Giannoulidis, Anastasios Gounaris, and John Paparrizos. BURST: Rendering clustering techniques suitable for evolving streams. *Proceedings of the VLDB Endowment*, 18(11):4054–4063, July 2025. CODEN ???? ISSN 2150-8097.

Bachras:2025:EFQ

[4267] Michail Bachras and Hans-Arno Jacobsen. Environmental footprints of query processing: a vision for sustainable database architectures. *Proceedings of the VLDB Endowment*, 18(11): 4064–4072, July 2025. CODEN ???? ISSN 2150-8097.

Li:2025:LMF

[4268] Fengxin Li, Yi Li, Yue Liu, Chao Zhou, Yuan Wang, Xiaoxiang Deng, Wei Xue, Dapeng Liu, Lei Xiao, Haijie Gu, Jie Jiang, Hongyan Liu, Biao Qin, and Jun He. LEADRE: Multi-faceted knowledge enhanced LLM empowered display advertisement recommender system. *Proceedings of the VLDB Endowment*, 18(12):4763–4776, August 2025. CODEN ???? ISSN 2150-8097.

Theodorakis:2025:TEG

[4269] Georgios Theodorakis, Hugo Firth, James Clarkson, Natacha Crooks, and Jim Webber. TuskFlow: an efficient graph database for long-running transactions. *Proceedings of the VLDB Endowment*, 18(12):4777–4790, August 2025. CODEN ???? ISSN 2150-8097.

Antonopoulos:2025:MMM

[4270] Panagiotis Antonopoulos, Mansi Chauhan, Shailender Dabas, Rajat Jain, Darshan Kattera, Wonseok Kim, Hanuma Kodavalla, Nikolas Ogg, Prashanth Purnananda, Rahul Ranjan, Alex Swanson, and Divyesh Tikmani. MD-MVCC: Multi-version concurrency control for schema changes in Azure SQL database. *Proceedings of the VLDB Endowment*, 18(12):4791–4803, August 2025. CODEN ???? ISSN 2150-8097.

Carey:2025:TPP

[4271] Michael Carey, Wail Alkowaileet, Nick DiGeronimo, Peeyush Gupta, Sachin Smotra, and Till Westmann. Towards principled, practical document database design. *Proceedings of the VLDB Endowment*, 18(12):4804–4816, August 2025. CODEN ???? ISSN 2150-8097.

Karpathiotakis:2025:SHM

[4272] Manos Karpathiotakis, Vlassios Rizopoulos, Basri Kahveci, Tiziano Carotti, Artem Gelum, Hazem Nada, and Yuri Dolgov. Scribe: How Meta transports terabytes per second in real time. *Proceedings of the VLDB Endowment*, 18(12):4817–4830, August 2025. CODEN ???? ISSN 2150-8097.

Ritter:2025:HNQ

[4273] Daniel Ritter, Mihnea Andrei, Sukhyeun Cho, Maik Görgens, Taehyung Lee, Norman May, Amit Pathak, and Paul R. Willems. The HANA native query engine for lakehouse systems. *Proceedings of the VLDB Endowment*, 18(12):4831–4845, August 2025. CODEN ???? ISSN 2150-8097.

Mei:2025:DSM

[4274] Yuan Mei, Rui Xia, Zhaoqian Lan, Kaitian Hu, Lei Huang, Paris Carbone, Yanfei Lei, Vasiliki Kalavri, Han Yin, and Feng Wang. Disaggregated state management in Apache Flink(R) 2.0. *Proceedings of the VLDB Endowment*, 18(12):4846–4859, August 2025. CODEN ???? ISSN 2150-8097.

Jiang:2025:SCL

[4275] Jie Jiang, Haining Xie, Siqi Shen, Yu Shen, Zihan Zhang, Meng Lei, Yifeng Zheng, Yang Li, Chunyou Li, Danqing Huang, Yinjun Wu, Wentao Zhang, Bin Cui, and Peng Chen. SiriusBI: a comprehensive LLM-powered solution for data analytics in business intelligence. *Proceedings of the VLDB Endowment*, 18(12):4860–4873, August 2025. CODEN ???? ISSN 2150-8097.

Chang:2025:SCM

[4276] Edward Y. Chang and Longling Geng. SagaLLM: Context management, validation, and transaction guarantees for multi-agent LLM planning. *Proceedings of the VLDB Endowment*, 18(12):4874–4886, August 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:UPC

[4277] Hongtao Yang, Zhichen Xu, Sergey Yudin, and Andrew Davidson. Unlocking the power of CI/CD for data pipelines in distributed data warehouses. *Proceedings of the VLDB Endowment*, 18(12):4887–4895, August 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:VHH

[4278] Jianjun Chen, Li Zhang, Yu Xie, Wei Ding, Lixun Cao, Ye Liu, Yonghua Ding, Fangshi Li, Ke Wu, Haibo Xiu, Kui Wei, Le Cai, Rui Chang, Yuxiang Chen, Yuanjin Lin, Shangyu Luo, Jianfeng Qian, Xu Wang, Zikang Wang, Jian Zhang, Mingyi Zhang, Shicai Zeng, Jason Sun, Lei Zhang, Rui Shi, and Pengwei Zhao. veDB-HTAP: a highly integrated, efficient and adaptive HTAP system. *Proceedings of the VLDB Endowment*, 18(12):4896–4909, August 2025. CODEN ???? ISSN 2150-8097.

Kanellis:2025:FFE

[4279] Konstantinos Kanellis, Badrish Chandramouli, Ted Hart, and Shivaram Venkataraman. From FASTER to F2: Evolving concurrent key–value store designs for large skewed workloads. *Proceedings of the VLDB Endowment*, 18(12):4910–4923, August 2025. CODEN ???? ISSN 2150-8097.

Chakkappen:2025:AIO

[4280] Sunil Chakkappen, Shreya Kunjibettu, Daniel McGreer, Masoomeh Javidi Kishi, Hong Su, Mohamed Ziauddin, Mohamed Zait, Zhan Li, and Yuying Zhang. Automatic indexing in Oracle. *Proceedings of the VLDB Endowment*, 18(12):4924–4937, August 2025. CODEN ???? ISSN 2150-8097.

Hubail:2025:CCJ

[4281] Murtadha Al Hubail, Ali Alsuliman, Wail Alkowaileet, Michael Blow, Michael Carey, Savyasach Enukonda, Peeyush Gupta, Santosh Hegde, Kamini Jagtiani, Abhishek Jindal, Mohammad Nawazish Khan, Mehnaz Mahin, Ian Maxon, M. Muralikrishna, Keshav Murthy, Daniel Nagy, Preetham Poluparthi, Ankit Prabhu, Ritik Raj, Vijay Sarathy, Shahrzad Shirazi, Utsav Singh, Hussain Towaileb, Ayush Tripathi, Janhavi Tripurwar, Bo-Chun Wang, and Till Westmann. Cloudy with a chance of JSON. *Proceedings of the VLDB Endowment*, 18 (12):4938–4950, August 2025. CODEN ???? ISSN 2150-8097.

Sun:2025:GVL

[4282] Ji Sun, Guoliang Li, James Pan, Jiang Wang, Yongqing Xie, Ruicheng Liu, and Wen Nie. GaussDB-Vector: a large-scale persistent real-time vector database for LLM applications. *Proceedings of the VLDB Endowment*, 18 (12):4951–4963, August 2025. CODEN ???? ISSN 2150-8097.

Song:2025:MHA

[4283] Jun Song, Jingyi Ding, Irshad Kandy, Yanghao Lin, Zhongjia Wei, Zilong Zhou, Zhiwei Peng, Jixi Shan, Hongyue Mao, Xiuqi Huang, Xun Song, Cheng Chen, Yanjia Li, Tianhao Yang, Wei Jia, Xiaohong Dong, Kang Lei, Rui Shi, Pengwei Zhao, and Wei Chen. Magnus: a holistic approach to data management for large-scale machine learning workloads. *Proceedings of the VLDB Endowment*, 18(12):4964–4977, August 2025. CODEN ???? ISSN 2150-8097.

Gao:2025:DED

[4284] Xin Gao, Sibasish Acharya, Sihui Han, Yongxiong Ren, Yanli Zhao, Liang Luo, Chucheng Wang, Pradeep Fernando, Saurabh Mishra, Siqi Yan, Yicong Du, Elzbieta Krepska, Intaik Park, Min Ni, Qunshu Zhang, and Shen Li. DECK: Experiences on delta checkpointing for industrial recommendation systems. *Proceedings of the VLDB Endowment*, 18(12):4978–4990, August 2025. CODEN ???? ISSN 2150-8097.

Jiang:2025:GPQ

[4285] Zhe Jiang, Zhaoguo Wang, Haoning Lan, Chuzhe Tang, Haoran Ding, Lefeng Wang, Songyun Zou, Zhuoran Wei, Yongcun Liu, Xiang Yu, Yang Ren, Guoliang Li, and Haibo Chen. GRewriter: Practical query rewriting with automatic rule set expansion in GaussDB. *Proceedings of the VLDB Endowment*, 18(12):4991–5003, August 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:FES

[4286] Jun-Peng Zhu, Lingfeng Zhang, Peng Cai, Xuan Zhou, Peisen Zhao, Xue Wang, and Linpeng Tang. FDBKeeper: Enabling scalable coordination services for metadata management using distributed key–value databases. *Proceedings of the VLDB Endowment*, 18(12): 5004–5016, August 2025. CODEN ???? ISSN 2150-8097.

Zhong:2025:VOS

[4287] Xiaoyao Zhong, Haotian Li, Jiabao Jin, Mingyu Yang, Deming Chu, Xiangyu Wang, Zhitao Shen, Wei Jia, George Gu, Yi Xie, Xuemin Lin, Heng Tao

Shen, Jingkuan Song, and Peng Cheng. VSAG: an optimized search framework for graph-based approximate nearest neighbor search. *Proceedings of the VLDB Endowment*, 18(12):5017–5030, August 2025. CODEN ???? ISSN 2150-8097.

Sun:2025:RBL

[4288] Zhaoyan Sun, Xuanhe Zhou, Guoliang Li, Xiang Yu, Jianhua Feng, and Yong Zhang. 12R-Bot: an LLM-based query rewrite system. *Proceedings of the VLDB Endowment*, 18(12):5031–5044, August 2025. CODEN ???? ISSN 2150-8097.

Schultz:2025:DMV

[4289] William Schultz and Murat Demirbas. Design and modular verification of distributed transactions in MongoDB. *Proceedings of the VLDB Endowment*, 18(12):5045–5058, August 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:SSP

[4290] Xinjun Yang, Feifei Li, Yingqiang Zhang, Hao Chen, Qingda Hu, Panfeng Zhou, Qiang Zhang, Shuai Li, Zongzhi Chen, Zheyu Miao, Rongbiao Xie, Chuan Sun, Zetao Wei, Jing Fang, Xingxuan Zhou, and Xiaofei Wu. From scale-up to scale-out: PolarDB's journey to achieving 2 billion tpmC. *Proceedings of the VLDB Endowment*, 18 (12):5059–5072, August 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:SSP

[4291] Mingyu Liu, Junbin Kang, Kai Wang, Lu Zhang, Haibo Chen, Xiuchang Li, and Tianhong Ding. ScaleCache: Scalable and production-grade buffer management for disk-based database systems. *Proceedings of the VLDB Endowment*, 18(12):5073–5085, August 2025. CODEN ???? ISSN 2150-8097.

Zhu:2025:TAC

[4292] Jun-Peng Zhu, Boyan Niu, Peng Cai, Zheming Ni, Jianwei Wan, Kai Xu, Jiajun Huang, Shengbo Ma, Bing Wang, Xuan Zhou, Guanglei Bao, Donghui Zhang, Liu Tang, and Qi Liu. Towards automated cross-domain exploratory data analysis through large language models. *Proceedings of the VLDB Endowment*, 18(12):5086–5099, August 2025. CODEN ???? ISSN 2150-8097.

Tong:2025:GAT

[4293] Bing Tong, Yan Zhou, Chen Zhang, Jianheng Tang, Jia Li, and Lei Chen. GalaxyWeaver: Autonomous table-to-graph conversion and schema optimization with large language models. *Proceedings of the VLDB Endowment*, 18 (12):5100–5112, August 2025. CODEN ???? ISSN 2150-8097.

Gubner:2025:FMB

[4294] Tim Gubner, Rune Humborstad, and Manyi Lu. Freely moving between the OLTP and OLAP worlds: Hermes — a high-performance OLAP accelerator for MySQL. *Proceedings of the VLDB Endowment*, 18(12):5113–5125, August 2025. CODEN ???? ISSN 2150-8097.

Szlang:2025:WIS

[4295] Jan Vincent Szlang, Sebastian Bress, Sebastian Cattes, Jonathan Dees, Florian Funke, Max Heimel, Michel Oleynik, Ismail Oukid, and Tobias Maltenberger. Workload insights from the snowflake data cloud: What do production analytic queries really look like? *Proceedings of the VLDB Endowment*, 18(12):5126–5138, August 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:APC

[4296] Fangyuan Zhang, Caihua Yin, Hua Fan, Fenghua Fang, Yineng Chen, Xuqi Wang, Mengqi Wu, Bing Chen, Tianbo Jin, Sibo Wang, Wenchao Zhou, and Feifei Li. AnalyticDB-PG: a cloud-native high-performance data warehouse in Alibaba Cloud. *Proceedings of the VLDB Endowment*, 18(12):5139–5152, August 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:SVE

[4297] Fangyuan Zhang, Mengqi Wu, Chunlei Xu, Yunong Bao, Jiyu Qiao, Yingli Zhou, Hua Fan, Caihua Yin, Wenchao Zhou, and Feifei Li. Streaming view: an efficient data processing engine for modern real-time data warehouse of Alibaba Cloud. *Proceedings of the VLDB Endowment*, 18(12):5153–5165, August 2025. CODEN ???? ISSN 2150-8097.

Upreti:2025:CEL

[4298] Nitish Upreti, Harsha Vardhan Simhadri, Hari Sudan Sundar, Krishnan Sundaram, Samer Boshra, Balachandar Perumalswamy, Shivam Atri, Martin Chisholm, Revti Raman Singh, Greg Yang, Tamara Hass, Nitesh Dudhey, Subramanyam Pattipaka, Mark Hildebrand, Magdalen Manohar, Jack Moffitt, Haiyang Xu, Naren Datha, Suryansh Gupta, Ravishankar Krishnaswamy, Prashant Gupta, Abhishek Sahu, Hemeswari Varada, Sudhanshu Barthwal, Ritika Mor, James Codella, Shaun Cooper, Kevin Pilch, Simon Moreno, Aayush Kataria, Santosh Kulkarni, Neil Deshpande, Amar Sagare, Dinesh Billa, Zishan Fu, and Vipul Vishal. Cost-effective, low latency vector search with Azure Cosmos DB. *Proceedings of the VLDB Endowment*, 18(12):5166–5183, August 2025. CODEN ???? ISSN 2150-8097.

Merli:2025:ULN

[4299] Matteo Merli, Sijie Guo, Penghui Li, Hang Chen, and Neng Lu. Ursa: a lakehouse-native data streaming engine for Kafka. *Proceedings of the VLDB Endowment*, 18(12):5184–5196, August 2025. CODEN ???? ISSN 2150-8097.

Puttaswamy:2025:DSO

[4300] Krishna Puttaswamy, Abhijit Chakankar, Tao Tao, Zaheera Valani, Ramesh Chandra, William Chau, Mengxi Chen, Akram Chetibi, Tianyi Huang, Jonathan Keller, Celia Kung, Andy Liu, Charlene Lyu, Samarth Shetty, Xiaotong Sun, Steve Weis, Lin Zhou, Ryan Zhu, Reynold Xin, and Matei Zaharia. Delta sharing: an open protocol for cross-platform data sharing. *Proceedings of the VLDB Endowment*, 18 (12):5197–5209, August 2025. CODEN ???? ISSN 2150-8097.

Lightstone:2025:STA

[4301] Sam Lightstone and Ping Wang. SQL:Trek automated index design at Airbnb. *Proceedings of the VLDB Endowment*, 18(12):5210–5222, August 2025. CODEN ???? ISSN 2150-8097.

Baeuerle:2025:TAC

[4302] Marc Baeuerle, Thomas Bodner, Martin Boissier, Tilmann Rabl, Ricardo Salazar Díaz, Florian Schmeller, Nils Strassenburg, Ilin Tolovski, Marcel Weisgut, and Wang Yue. TCO 2: Analyzing the carbon footprint of database server replacements. *Proceedings of the VLDB Endowment*, 18(12):5223–5226, August 2025. CODEN ???? ISSN 2150-8097.

Koupil:2025:FHN

[4303] Pavel Koupil, Jáchym Bártík, Stefan Klessinger, André Conrad, and Stefanie Scherzinger. FDepHunter: Harnessing negative examples to expose fakes and reveal ghosts. *Proceedings of the VLDB Endowment*, 18(12):5227–5230, August 2025. CODEN ???? ISSN 2150-8097.

Kang:2025:VDE

[4304] Rong Kang, Shuai Wang, Tieying Zhang, Xianghong Xu, Linhui Xu, Zhimin Liang, Lei Zhang, Rui Shi, and Jianjun Chen. VIDEX: a disaggregated and extensible virtual index for the cloud and AI era. *Proceedings of the VLDB Endowment*, 18(12):5231–5234, August 2025. CODEN ???? ISSN 2150-8097.

Yona:2025:DCC

[4305] Roi Yona, Jonathan Breitman, and Benny Kimelfeld. DVote: Constraining committee voting with database dependencies. *Proceedings of the VLDB Endowment*, 18(12):5235–5238, August 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:GCI

[4306] Yangxin Fan, Haolai Che, Mingjian Lu, and Yinghui Wu. Graph compression for interpretable graph neural network inference at scale. *Proceedings of the VLDB Endowment*, 18(12):5239–5242, August 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:QRT

[4307] Bingnan Chen, Binyang Dai, Qichen Wang, and Ke Yi. Query running too slow? Rewrite it with Quorion! *Proceedings of the VLDB Endowment*, 18(12):5243–5246, August 2025. CODEN ???? ISSN 2150-8097.

Jensen:2025:DMM

[4308] Søren Kejser Jensen, Christian Schmidt Godiksen, Christian Thomsen, and Torben Bach Pedersen. Demonstration of ModelarDB: Model-based management of high-frequency time series across edge, cloud, and client. *Proceedings of the VLDB Endowment*, 18(12):5247–5250, August 2025. CODEN ???? ISSN 2150-8097.

Lambrecht:2025:DM

[4309] Louisa Lambrecht, Tim Findling, Samuel Heid, Marcel Knüdeler, and Torsten Grust. Democratize MATCH$_{R}ECOGNIZE!ProceedingsoftheVLDBEndowment$, 18 (12) : 5251 − −5254, $August$2025.$CODEN$????$ISSN$2150− 8097.

Heinrich:2025:OBB

[4310] Roman Heinrich, Oleksandr Havrylov, Manisha Luthra, Johannes Wehrstein, and Carsten Binnig. Opening the black-box: Explaining learned cost models for databases. *Proceedings of the VLDB Endowment*, 18(12):5255–5258, August 2025. CODEN ???? ISSN 2150-8097.

Emani:2025:HRC

[4311] Venkatesh Emani, Wenjing Wang, Zi Ye, Jia He, Neel Ball, Kumaraswamy Boora, Carlo Curino, Avrilia Floratou, Manan Goenka, Paridhi Gupta, Vivek Gupta, Katherine Lin, Nick Litombe, Jared Meade, Suryakant Mutnal, Mark Pryce-Maher, Raghu Ramakrishnan, Sudhir Raparla, Dhruv Relwani, Shyam Sai, Vaibhave Sekar, Roneet Shaw, Harmeet Singh, Prasanna Sridharan, Mark Taylor, Sunidhi Tiwari, and Yiwen Zhu. Horizon: Robust checks for SQL migration using LLMs. *Proceedings of the VLDB Endowment*, 18(12):5259–5262, August 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:DQR

[4312] Wenhao Liu, Xiu Tang, Sai Wu, Chang Yao, Gongsheng Yuan, and Gang Chen. A demonstration of QueryArtisan: Real-time data lake analysis via dynamically generated data manipulation code. *Proceedings of the VLDB Endowment*, 18(12):5263–5266, August 2025. CODEN ???? ISSN 2150-8097.

Cohen:2025:RRS

[4313] Dvir Cohen, Liad Domb, Avigdor Gal, Lior Ganon, Eliezer Gavriel, Omri Lazover, Coral Scharf, and Bar Shterenberg. RecForUS: a recommender system for uncertain scores. *Proceedings of the VLDB Endowment*, 18(12):5267–5270, August 2025. CODEN ???? ISSN 2150-8097.

Trudslev:2025:PTI

[4314] Frederik Marinus Trudslev, Matteo Lissandrini, Juan Manuel Rodriguez, Martin Bøgsted, and Daniele Dell'Aglio. PrivEval: a tool for interactive evaluation of privacy metrics in synthetic data generation. *Proceedings of the VLDB Endowment*, 18(12):5271–5274, August 2025. CODEN ???? ISSN 2150-8097.

Psarakis:2025:SAT

[4315] Kyriakos Psarakis, Oto Mraz, George Christodoulou, George Siachamis, Marios Fragkoulis, and Asterios Katsifodimos. Styx in action: Transactional cloud applications made easy. *Proceedings of the VLDB Endowment*, 18(12):5275–5278, August 2025. CODEN ???? ISSN 2150-8097.

Marcy:2025:CSK

[4316] Mathilde Marcy, Jean-Marc Petit, Vasile-Marian Scuturici, Jocelyn Bonjour, Camille Fertel, and Gerald Cavalier. Can surrogate keys negatively impact data quality? *Proceedings of the VLDB Endowment*, 18(12):5279–5282, August 2025. CODEN ???? ISSN 2150-8097.

Hattasch:2025:JJI

[4317] Benjamin Hättasch, Leon Krüger, and Carsten Binnig. JUSTINE (JUST-INsert Engine): Demonstrating self-organizing data schemas. *Proceedings of the VLDB Endowment*, 18(12):5283–5286, August 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:USU

[4318] Jiayi Wang, Yuan Li, Jianming Wu, Shihui Xu, and Guoliang Li. Unify: a system for unstructured data analytics. *Proceedings of the VLDB Endowment*, 18(12):5287–5290, August 2025. CODEN ???? ISSN 2150-8097.

Beischl:2025:UPR

[4319] Alexander Beischl and Thomas Neumann. UmbraPerf — profiling results tailored for DBMS developers. *Proceedings of the VLDB Endowment*, 18(12):5291–5294, August 2025. CODEN ???? ISSN 2150-8097.

Mohanaraj:2025:SSA

[4320] Abiram Mohanaraj, Matteo Lissandrini, and Katja Hose. Smart SPARQL

Advisor: Guiding users in query formulation with performance prediction. *Proceedings of the VLDB Endowment*, 18(12):5295–5298, August 2025. CODEN ???? ISSN 2150-8097.

Zhou:2025:AHD

[4321] Jiatang Zhou, Kaisong Huang, Zhuoyue Zhao, Dong Xie, and Tianzheng Wang. Analytics are heavy. The DBMS is busy. When will my mission-critical transaction start running? *Proceedings of the VLDB Endowment*, 18(12): 5299–5302, August 2025. CODEN ???? ISSN 2150-8097.

Veltri:2025:ATI

[4322] Enzo Veltri, Donatello Santoro, Jean-Flavien Bussotti, and Paolo Papotti. Accelerating tabular inference: Training data generation with TENET. *Proceedings of the VLDB Endowment*, 18 (12):5303–5306, August 2025. CODEN ???? ISSN 2150-8097.

Zhang:2025:ABP

[4323] Xukang Zhang, Huanchen Zhang, and Xiaofeng Meng. Accordion: Balancing performance and cost in cloud–native data analysis with intra-query runtime elasticity. *Proceedings of the VLDB Endowment*, 18(12):5307–5310, August 2025. CODEN ???? ISSN 2150-8097.

Gu:2025:HSQ

[4324] Long Gu, Shaza Zeitouni, Carsten Binnig, and Zsolt István. How SMPC query execution can be sped up through efficient and flexible intermediate result size trimming. *Proceedings of the VLDB Endowment*, 18(12):5311–5314, August 2025. CODEN ???? ISSN 2150-8097.

Gavriilidis:2025:EWF

[4325] Haralampos Gavriilidis, Joel Ziegler, Midhun Kaippillil Venugopalan, Benedikt Didrich, Matthias Boehm, and Volker Markl. Enter the warp: Fast and adaptive data transfer with XDBC. *Proceedings of the VLDB Endowment*, 18 (12):5315–5318, August 2025. CODEN ???? ISSN 2150-8097.

Zecchini:2025:RDS

[4326] Luca Zecchini, Ziawasch Abedjan, Vasilis Efthymiou, and Giovanni Simonini. RadlER: Deduplicated sampling on-demand. *Proceedings of the VLDB Endowment*, 18(12):5319–5322, August 2025. CODEN ???? ISSN 2150-8097.

Shinde:2025:MGD

[4327] Amey Shinde, Viraj Sabhaya, Kevin Farokhrouz, Fariba Irany, Ali Khan, Sanjukta Bhowmick, Abhishek Santra, and Sharma Chakravarthy. MLNgeeWhiz: a dashboard for supporting complete life-cycle of complex data analysis using multilayer networks. *Proceedings of the VLDB Endowment*, 18(12):5323–5326, August 2025. CODEN ???? ISSN 2150-8097.

Xiu:2025:HQH

[4328] Haibo Xiu, Yang Li, Qianyu Yang, Weihang Guo, Yuxi Liu, Pankaj K. Agarwal, Sudeepa Roy, and Jun Yang. Hint-QPT: Hints for robust query performance tuning. *Proceedings of the VLDB Endowment*, 18(12):5327–5330, August 2025. CODEN ???? ISSN 2150-8097.

Agmon:2025:CFC

[4329] Shunit Agmon, David Avigdor, Brit Youngmann, Amir Gilad, and Benny

Kimelfeld. ClaimIt: Finding convincing views to endorse a claim. *Proceedings of the VLDB Endowment*, 18(12): 5331–5334, August 2025. CODEN ???? ISSN 2150-8097.

Jezek:2025:DBQ

[4330] Filip Ježek, Pavel Koupil, Michal Kopecký, Jáchym Bártík, and Irena Holubová. DortDB: Bridging query languages for multi-model data ponds. *Proceedings of the VLDB Endowment*, 18(12):5335–5338, August 2025. CODEN ???? ISSN 2150-8097.

Qian:2025:DMO

[4331] Zekai Qian, Xiaoou Ding, Chen Wang, and Hongzhi Wang. DemandClean: a multi-objective learning framework for balancing model tolerance to data authenticity and diversity. *Proceedings of the VLDB Endowment*, 18(12):5339–5342, August 2025. CODEN ???? ISSN 2150-8097.

Ding:2025:TTA

[4332] Xiaoou Ding, Yanshuo Liu, Zhounan Chen, Hongzhi Wang, Chen Wang, and Jianmin Wang. TARImpute: Task-aware auto-recommender system for missing value imputation algorithms with clustering case studies. *Proceedings of the VLDB Endowment*, 18(12): 5343–5346, August 2025. CODEN ???? ISSN 2150-8097.

Huang:2025:DPI

[4333] Yuchuan Huang, Ana Elena Uribe, Youssef Hussein, Grant Ogren, Kareem Eldahshoury, and Mohamed F. Mokbel. A demonstration of Polaris: an interactive and scalable data infrastructure for polar science. *Proceedings of the VLDB Endowment*, 18(12):5347–5350, August 2025. CODEN ???? ISSN 2150-8097.

Chen:2025:GDE

[4334] Zixuan Chen, Jinyang Li, H. V. Jagadish, and Mirek Riedewald. GooseDB: a database engine that optimally refines top-k queries to satisfy representation constraints. *Proceedings of the VLDB Endowment*, 18(12):5351–5354, August 2025. CODEN ???? ISSN 2150-8097.

Ntouni:2025:NNC

[4335] Ourania Ntouni, Dimitrios Banelas, and Nikos Giatrakos. NeuroFlinkCEP: Neurosymbolic complex event recognition optimized across IoT platforms. *Proceedings of the VLDB Endowment*, 18(12):5355–5358, August 2025. CODEN ???? ISSN 2150-8097.

Grafberger:2025:MII

[4336] Stefan Grafberger, Paul Groth, and Sebastian Schelter. mlidea: Interactively improving ML data preparation code via “shadow pipelines”. *Proceedings of the VLDB Endowment*, 18(12):5359–5362, August 2025. CODEN ???? ISSN 2150-8097.

Koehler:2025:MMK

[4337] Henning Koehler and Sebastian Link. Mining meaningful keys and foreign keys with high precision and recall. *Proceedings of the VLDB Endowment*, 18(12):5363–5366, August 2025. CODEN ???? ISSN 2150-8097.

Benjira:2025:SKF

[4338] Wissal Benjira, Nicolas Travers, Faten Atigui, Bénédicte Bucher, and Malika Grim-Yefsah. SDG-KG: a framework to compute SDG indicators with open data. *Proceedings of the VLDB Endowment*, 18(12):5367–5370, August 2025. CODEN ???? ISSN 2150-8097.

Fan:2025:FPP

[4339] Zeheng Fan, Yuxiang Zeng, Zhuanglin Zheng, and Yongxin Tong. FedVSE: a privacy-preserving and efficient vector search engine for federated databases. *Proceedings of the VLDB Endowment*, 18(12):5371–5374, August 2025. CODEN ???? ISSN 2150-8097.

Eggers:2025:ADL

[4340] Sebastian Eggers, Nina Zukowska, and Ziawasch Abedjan. APEX-DAG: Library and language independent pipeline EXtraction. *Proceedings of the VLDB Endowment*, 18(12):5375–5378, August 2025. CODEN ???? ISSN 2150-8097.

Ahmadi:2025:DMM

[4341] Fatemeh Ahmadi, Julian Paulußen, and Ziawasch Abedjan. Demonstrating Matelda for multi-table error detection. *Proceedings of the VLDB Endowment*, 18(12):5379–5382, August 2025. CODEN ???? ISSN 2150-8097.

Wu:2025:DGB

[4342] Qingliu Wu, Qingfeng Xiang, Yingxia Shao, Qiyao Luo, and Quanqing Xu. DBPecker: a graph-based compound anomaly diagnosis system for distributed RDBMSs. *Proceedings of the VLDB Endowment*, 18(12):5383–5386, August 2025. CODEN ???? ISSN 2150-8097.

Li:2025:DDU

[4343] Zequn Li, Yuanhao Zhong, Chengliang Chai, Zhaoze Sun, Yuhao Deng, Ye Yuan, Guoren Wang, and Lei Cao. DocDB: a database for unstructured document analysis. *Proceedings of the VLDB Endowment*, 18(12):5387–5390, August 2025. CODEN ???? ISSN 2150-8097.

Yan:2025:CCA

[4344] Jianxin Yan, Wangze Ni, Lei Chen, Xuemin Lin, Peng Cheng, Zhan Qin, and Kui Ren. ContextCache: Context-aware semantic cache for multi-turn queries in large language models. *Proceedings of the VLDB Endowment*, 18(12):5391–5394, August 2025. CODEN ???? ISSN 2150-8097.

Zacouris:2025:STS

[4345] Zenon Zacouris and Maribel Acosta. Simulating a transactional server for multi-model systems. *Proceedings of the VLDB Endowment*, 18(12):5395–5398, August 2025. CODEN ???? ISSN 2150-8097.

Cui:2025:TTA

[4346] Lingxi Cui, Guanyu Jiang, Huan Li, Ke Chen, Lidan Shou, and Gang Chen. TableCopilot: a table assistant empowered by natural language conditional table discovery. *Proceedings of the VLDB Endowment*, 18(12):5399–5402, August 2025. CODEN ???? ISSN 2150-8097.

Cao:2025:LSL

[4347] Shuting Cao, Zeping Niu, and Guoliang Li. LETIndex: a secure learned index with TEE. *Proceedings of the VLDB Endowment*, 18(12):5403–5406, August 2025. CODEN ???? ISSN 2150-8097.

Fama:2025:PWP

[4348] Mauro Famà, Alessandro Ferri, Samuele Langhi, Riccardo Tommasini, and Angela Bonifati. Play2Win: a windowing playground for continuous queries. *Proceedings of the VLDB Endowment*, 18(12):5407–5410, August 2025. CODEN ???? ISSN 2150-8097.

Bellomarini:2025:VLF

[4349] Luigi Bellomarini, Andrea Gentili, Davide Magnanimi, and Emanuel Sallinger. Vadacode: a logician-friendly IDE for Datalog$^{\pm}$. *Proceedings of the VLDB Endowment*, 18(12):5411–5414, August 2025. CODEN ???? ISSN 2150-8097.

Dorbani:2025:BQD

[4350] Anas Dorbani, Sunny Yasser, Jimmy Lin, and Amine Mhedhbi. Beyond quacking: Deep integration of language models and RAG into DuckDB. *Proceedings of the VLDB Endowment*, 18 (12):5415–5418, August 2025. CODEN ???? ISSN 2150-8097.

Yang:2025:SVS

[4351] Fan Yang and John Paparrizos. SAIL: a voyage to symbolic approximation solutions for time-series analysis. *Proceedings of the VLDB Endowment*, 18(12): 5419–5422, August 2025. CODEN ???? ISSN 2150-8097.

Warner:2025:BDM

[4352] Annabelle Warner, Andrew McNutt, Paul Rosen, and El Kindi Rezig. Buckaroo: a direct manipulation visual data wrangler. *Proceedings of the VLDB Endowment*, 18(12):5423–5426, August 2025. CODEN ???? ISSN 2150-8097.

Khatri:2025:SIL

[4353] Akash Khatri, Mir Mahathir Mohammad, and El Kindi Rezig. Sort it like you mean it: Discovering semantically interesting attribute augmentations to sort tables. *Proceedings of the VLDB Endowment*, 18(12):5427–5430, August 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:EDA

[4354] Qinghua Liu, Seunghak Lee, and John Paparrizos. EasyAD: a demonstration of automated solutions for time-series anomaly detection. *Proceedings of the VLDB Endowment*, 18(12):5431–5434, August 2025. CODEN ???? ISSN 2150-8097.

Bahadori:2025:LLA

[4355] Tarlan Bahadori, Sai Sreekar Sarvepalli, and Ahmed Eldawy. LASEK: LLM-assisted style exploration kit for geospatial data. *Proceedings of the VLDB Endowment*, 18(12):5435–5438, August 2025. CODEN ???? ISSN 2150-8097.

Liu:2025:DQQ

[4356] Hanwen Liu, Federico Spedalieri, and Ibrahim Sabek. A demonstration of Q^2O: Quantum-augmented query optimizer. *Proceedings of the VLDB Endowment*, 18(12):5439–5443, August 2025. CODEN ???? ISSN 2150-8097.

Skavantzos:2025:WER

[4357] Philipp Skavantzos and Sebastian Link. When entity/relationship models meet graph databases. *Proceedings of the VLDB Endowment*, 18(12):5444–5447, August 2025. CODEN ???? ISSN 2150-8097.

Cormode:2025:STD

[4358] Graham Cormode, Shripad Gade, Samuel Maddock, and Enayat Ullah.

Synthetic tabular data: Methods, attacks and defenses. *Proceedings of the VLDB Endowment*, 18(12):5448–5450, August 2025. CODEN ???? ISSN 2150-8097.

Hussein:2025:LLM

[4359] Youssef Hussein, Mohamed Hemdan, and Mohamed F. Mokbel. Large language models for spatial analysis queries. *Proceedings of the VLDB Endowment*, 18(12):5451–5454, August 2025. CODEN ???? ISSN 2150-8097.

Abedjan:2025:DDD

[4360] Ziawasch Abedjan, Mahdi Esmailoghli, and Sainyam Galhotra. Data discovery in data lakes: Operations, indexes, systems. *Proceedings of the VLDB Endowment*, 18(12):5455–5459, August 2025. CODEN ???? ISSN 2150-8097.

Yan:2025:SSG

[4361] Da Yan, Lyuheng Yuan, Akhlaque Ahmad, and Saugat Adhikari. Systems for scalable graph analytics and machine learning: Trends and methods. *Proceedings of the VLDB Endowment*, 18 (12):5460–5465, August 2025. CODEN ???? ISSN 2150-8097.

Luo:2025:NLS

[4362] Yuyu Luo, Guoliang Li, Ju Fan, Chengliang Chai, and Nan Tang. Natural language to SQL: State of the art and open problems. *Proceedings of the VLDB Endowment*, 18(12):5466–5471, August 2025. CODEN ???? ISSN 2150-8097.

Rico:2025:NTD

[4363] Ramon Rico, Arno Siebes, and Yannis Velegrakis. New trends in data forgetting for sustainable data management. *Proceedings of the VLDB Endowment*, 18(12):5472–5476, August 2025. CODEN ???? ISSN 2150-8097.

Kondylakis:2025:PGS

[4364] Haridimos Kondylakis, Stefania Dumbrava, Matteo Lissandrini, Nikolay Yakovets, Angela Bonifati, Vasilis Efthymiou, George Fletcher, Dimitris Plexousakis, Riccardo Tommasini, Georgia Troullinou, and Elisjana Ymeralli. Property graph standards: State of the art & open challenges. *Proceedings of the VLDB Endowment*, 18 (12):5477–5481, August 2025. CODEN ???? ISSN 2150-8097.

Heinrich:2025:LCM

[4365] Roman Heinrich, Xiao Li, Manisha Luthra, and Zoi Kaoudi. Learned cost models for query optimization: From batch to streaming systems. *Proceedings of the VLDB Endowment*, 18(12): 5482–5487, August 2025. CODEN ???? ISSN 2150-8097.

Chronis:2025:FVS

[4366] Yannis Chronis, Helena Caminal, Yannis Papakonstantinou, Fatma Özcan, and Anastasia Ailamaki. Filtered vector search: State-of-the-art and research opportunities. *Proceedings of the VLDB Endowment*, 18(12):5488–5492, August 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:MAM

[4367] Mengying Wang, Moming Duan, Yicong Huang, Chen Li, Bingsheng He, and Yinghui Wu. ML-asset management: Curation, discovery, and utilization. *Proceedings of the VLDB Endowment*, 18(12):5493–5498, August 2025. CODEN ???? ISSN 2150-8097.

Wang:2025:MLG

[4368] Hanchen Wang, Ying Zhang, and Wenjie Zhang. Machine learning for graph data management and query processing. *Proceedings of the VLDB Endowment*, 18(12):5499–5503, August 2025. CODEN ???? ISSN 2150-8097.

Pan:2025:DPL

[4369] James Pan and Guoliang Li. Database perspective on LLM inference systems. *Proceedings of the VLDB Endowment*, 18(12):5504–5507, August 2025. CODEN ???? ISSN 2150-8097.

Bonifati:2025:VPG

[4370] Angela Bonifati. Versatile property graph transformations. *Proceedings of the VLDB Endowment*, 18(12):5516–5526, August 2025. CODEN ???? ISSN 2150-8097.

Yu:2025:DNA

[4371] Xiangyao Yu. Disaggregation: a new architecture for cloud databases. *Proceedings of the VLDB Endowment*, 18 (12):5527–5530, August 2025. CODEN ???? ISSN 2150-8097.

Leis:2025:SAH

[4372] Viktor Leis, Andrey Gubichev, Atanas Mirchev, Peter Boncz, Alfons Kemper, and Thomas Neumann. Still asking: How good are query optimizers, really? *Proceedings of the VLDB Endowment*, 18(12):5531–5536, August 2025. CODEN ???? ISSN 2150-8097.

Idreos:2025:AGC

[4373] Stratos Idreos. Alphabets, grammars, calculators, and the end of handcrafted systems. *Proceedings of the VLDB Endowment*, 18(12):5537, August 2025. CODEN ???? ISSN 2150-8097.

Freire:2025:BDD

[4374] Juliana Freire. Bridging disciplines in data management research to solve complex data problems. *Proceedings of the VLDB Endowment*, 18(12):5538, August 2025. CODEN ???? ISSN 2150-8097.

Zaharia:2025:BOA

[4375] Matei Zaharia. Bringing the operational and analytical worlds together with Lakebase. *Proceedings of the VLDB Endowment*, 18(12):5539, August 2025. CODEN ???? ISSN 2150-8097.