A Bibliography of Publications in *ACM SIGARCH Computer Architecture News*

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Arbitrary [SA15, WJZ15, CWS+11, Dvo90, KIC+16]. **arbitrated** [PVAL95]. **Arbitration** [SKJ+17, KC82, MSB+02, TTCM12, VM88, WS07]. **Arbor** [IEE84]. **Archipelago** [LNBZ08]. **Architecting** [LIMB09, MDS+11, BSK+10]. **architects** [SAR99]. **Architectural** [ADP+15, ALE90, BF87, BRC+05, BMA00, BCD89, CL09, CW02, CRW+15, CSGT17, CH87, CMT00, CHKM93, DHR+15, FSC76, Gal80, GSL17, GRD87, HvDJL80, Hic17, HLL+93, HH93, IAD+94, IHM89, Jou89, KMOA07, KKK+17, LGH92, LABR08, Mas96, MCC+06a, NaR07, Ozt15, PHB14, PCDL09, PBGM09, Ram88, RGG82, Ros96, Sat74, Sch73b, SG94, SL12, TML+00, Yue99a, ZYLG05, ZQL+04, AD98, BTM00, CLL01, CMF+13, CMC+91, CMC+98, CS94, CFS+12, DLL+16, DF92, DS11, DBMZ08, EA97, Fre87, GKF84, GB87, Gra84, HO91, Har82, HM93, HS90, HSH96, mWH98, ÏMC+06, Jag80, Joh82, KC95, KBS84, KMS+12, KHN07, LCS10a, MSI82, MW12, NEEJ12, NKQ13, NI85, NWD93, PL06, PGRT01, PZT02, RGP82, SYK10, SLLG05, Sta89, SSP97, TNNI87, VCK+12, WHG07, ZR14, dKNS10]. **architectural-level** [BTM00]. **Architecture** [ACM80, ACM89, ACM91, ACM93a, ACM95, ACM96, ACM97, ACM98a, ACM00, ACM01, ACM02a, ACM04, ACAAT16, ABZ07, BTRS05, BKSO05, Bat80, Bat98b, Ben82, Bhu83, BTC06, CTHV+15, Chu77a, CBC+05, CGL89, Col88, DCC+87, DCC+98, DKD+15, ESCB12, FR89, FXZ+17, FKMD83, GSSV00, HMT86, HCJC06, HTM+05, HJS00, HYHD95, IEE76, IEE77, IEE79, IEE81, IEE82, IEE83, IEE84, IEE85, IEE86, IEE87, IEE88, IEE90, IEE92, IEE94, IEE99, IEE03, IEE05, IEE06, JLFM15, KK84, KNP06, Kin75, KBH+04, KOA05, LKM+05, LWB08, LJdL+16, LLW+06, LS73, MSS+15, MCK16, MCN+17, Mil77b, Moo85, Mud96, MRH+16, PED+08, Pat06, PGH+83, PQNT16, Pou77, PZK+17, Ros73, SCU+14, SLG+05, SOM+08, Sin92a, SHMZ94, Tak88, TS05, TLM+04, Tho81, UBF+84, VRB+17, WJZ15, WCX17, Whi78, YXR06, ZWM+14, ZH17, APGP07, AAM76, ALKK90, ABC+95]. **architecture** [ABC+98, Aga98, AA82, ACC+03, ATV+07, ASP+03, And90, ALBL91, ABL+80, AAG+86, AFNV90, AAG+98, AP76, Asl84, Aßm93, ACM+98b, Aup80, AML+10, BGM+00, BGP+01, BFGP06, BFP07, Ber76, BB90, BC91, Bic84, BSD87, BSF+91, Bon13, Bou75, BC04, BC02, BR92b, Bur84, BAB88, CMF+13, Cal74, CDP82, CBK+14, CLVW93, CL94, CCE+09, CES16, Che81, Che92, CLX+16, Chu77b, Cit03, CNO+87, CmWH91, CLS73, Cox79, Cra85, CC05, CRM91, DG90, DK85, Dal10, DKK07, Das83, Dav80b, DRCO05, De 90, DCB+94, Den80, DM74, Den76, DM98, Den98, Den03, DJ09, DP80, DMB87a, DP98b, DP98a, DDP85, DK89, Dor75, DV87b, Dow87, Dow88a, Dri99, Dug83, Dvo90, EO98, Ega82, ED83, EAE+02, Est02, EE93, EEKS06, FD87, FB08, FB92, Feu76, FCP92, FF73, FR72, Fon03]. **architecture** [Fos73, FeOBA05, Fra83, FHH+89, FAYA87, FSS73, GAS16, GK78, Geh14, GK85, GSS12b, Gil83, GS12, GS74, Gol84, GtHL+85, GHKM11, GS80, HG97, HR91, HW80, HF88, Har86, HTCU10, Har73, HFWZ87, Hay77, HSW+00, HKN+92, Hir86, HLS05, HSC+90, HK09, HC85, HK77, HW95, Hu85, HKA+01, HG88, HC99, HP86, HP98, mWHP98, Ian88, Ino05, IBC12, IT84, ISKR86, JLZ09, JSL+13, JW82, JBW89, JB97, KHP+95, Kee79b, Keh76, KJJ+09, KKC92, Kie87, KL03, KKC+16b, KL91, KPG98, Kno73, KSS+95, KS91b, KACG88, KBC+00, KMT91, Laf03, Lap90, Lap91, Las89b, LMND76, LR93, LHG+16, LS12b, LWS75, LNEHR11, LSY+14, LL14, LDT+16, LH88, MK84, MPPZ87, MPJ+00, Mar00, Mar85, MK12, MVCA97, May82, MC93,

O

[SDV+87]. **ZS-1** [SDV+87]. **ZSim** [SK13]. **Zynq** [JLFM15].

References

Ahuja:1982:MMA

[AA82] Sudhir R. Ahuja and Abhaya Asthana. A multi-microprocessor architecture with hardware support for communication and scheduling. *ACM SIGARCH Computer Architecture News*, 10 (2):205–209, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agrawal:1984:BHH

[AA84] Dharma P. Agrawal and Winser E. Alexander. B-HIVE: a heterogeneous, interconnected, versatile and expandable multicomputer system. *ACM SIGARCH Computer Architecture News*, 12 (2):7–13, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agrawal:1986:SIR

[AA86] P. Agrawal and R. Agrawal. Software implementation of a recursive fault tolerance algorithm on a network of computers. *ACM SIGARCH Computer Architecture News*, 14 (2):65–72, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Adams:2006:CSH

[AA06] Keith Adams and Ole Agesen. A comparison of software and hardware techniques for x86 virtualization. *ACM SIGARCH Computer Architecture News*, 34(5):2–13, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agyeman:2011:PAO

[AA11a] Michael Opoku Agyeman and Ali Ahmadinia. Power and area optimisation in heterogeneous 3D networks-on-chip architectures. *ACM SIGARCH Computer Architecture News*, 39(4):106–107, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Akagic:2011:HSC

[AA11b] Amila Akagić and Hideharu Amano. High speed CRC with 64-bit generator polynomial on an FPGA. *ACM SIGARCH Computer Architecture News*, 39(4):72–77, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alpert:1990:PCL

[AAD90] D. Alpert, A. Averbuch, and O. Danieli. Performance comparison of load/store and symmetric instruction set architectures. *ACM SIGARCH*

Computer Architecture News, 18(3a):172–181, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ashraf:1998:IRM

[AAEBAT98] Farooq Ashraf, Mostafa Abd-El-Barr, and Khalid Al-Tawil. Introduction to routing in multicomputer networks. *ACM SIGARCH Computer Architecture News*, 26(5):14–21, December 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annaratone:1986:WAI

[AAG+86] M. Annaratone, E. Arnould, T. Gross, H. T. Kung, and M. S. Lam. Warp architecture and implementation. *ACM SIGARCH Computer Architecture News*, 14(2):346–356, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annaratone:1998:WAI

[AAG+98] Marco Annaratone, Emmanuel Arnould, Thomas Gross, H. T. Kung, Monica S. Lam, Onat Menzilcioğlu, Ken Sarocky, and Jon A. Webb. Warp architecture and implementation. In ACM [ACM98a], pages 309–319. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Adve:1991:CHS

[AAHV91] Sarita V. Adve, Vikram S. Adve, Mark D. Hill, and Mary K. Vernon. Comparison of hardware and software cache coherence schemes. *ACM SIGARCH Computer Architecture News*, 19(3):298–308, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abd-Alla:1976:LAT

[AAM76] A. M. Abd-Alla and Laird H. Moffett. On-line architecture tuning using microcapture. *ACM SIGARCH Computer Architecture News*, 4 (4):165–171, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anido:1989:TPT

[AAZ89] M. L. Anido, D. J. Allerton, and E. J. Zaluska. A three-port/three-access register file for concurrent processing and I/O communication in a RISC-like graphics engine. *ACM SIGARCH Computer Architecture News*, 17(3):354–361, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Archibald:1984:ESC

[AB84] James Archibald and Jean Loup Baer. An economical solution to the cache coherence problem. *ACM SIGARCH Computer Architecture News*, 12(3):355–362, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anantharaman:1986:HAS

[AB86] T. S. Anantharaman and R. Bisiani. A hardware accelerator for speech recognition algorithms. *ACM SIGARCH Computer Architecture News*, 14(2):216–223, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abnous:1992:PBV

[AB92] Arthur Abnous and Nader Bagherzadeh. Pipelining and bypassing in a VLIW processor (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):434, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Allen:1994:RWR

[ABC+94] Phil Allen, Franc Brglez, Hal Carter, Robert Caverly, Jerry Dillion, Albert Lo, Ron Lomax, John Oldfield, Cesar Pina, and T. J. Wilkinson. Report of the 1993 Workshop on Rapid Prototyping of Microelectronic Systems for Universities. *ACM SIGARCH Computer Architecture News*, 22 (3):19–26, June 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1995:AMA

[ABC+95] Anant Agarwal, Ricardo Bianchini, David Chaiken, Kirk L. Johnson, David Kranz, John Kubiatowicz, Beng-Hong Lim, Kenneth Mackenzie, and Donald Yeung. The MIT Alewife machine: architecture and performance. *ACM SIGARCH Computer Architecture News*, 23(2):2–13, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alvarez:1997:TMF

[ABC97] Guillermo A. Alvarez, Walter A. Burkhard, and Flaviu Cristian. Tolerating multiple failures in RAID architectures with optimal storage and uniform declustering. *ACM SIGARCH Computer Architecture News*, 25 (2):62–72, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1998:AMA

[ABC+98] Anant Agarwal, Ricardo Bianchini, David Chaiken, Kirk L. Johnson, David Kranz, J. Kubiatowicz, B.-H. Lim, K. Mackenzie, and D. Yeung. The MIT Alewife machine: architecture and performance. In

ACM [ACM98a], pages 509–520. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Arunkumar:2017:MGM

[ABC+17] Akhil Arunkumar, Evgeny Bolotin, Benjamin Cho, Ugljesa Milic, Eiman Ebrahimi, Oreste Villa, Aamer Jaleel, Carole-Jean Wu, and David Nellans. MCM-GPU: Multi-chip-module GPUs for continued performance scalability. *ACM SIGARCH Computer Architecture News*, 45(2):320–332, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alglave:2015:GCW

[ABD+15] Jade Alglave, Mark Batty, Alastair F. Donaldson, Ganesh Gopalakrishnan, Jeroen Ketema, Daniel Poetzl, Tyler Sorensen, and John Wickerson. GPU concurrency: Weak behaviours and programming assumptions. *ACM SIGARCH Computer Architecture News*, 43(1):577–591, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Amano:1985:SIN

[ABKA85] Hideharu Amano, Taisuke Boku, Tomohiro Kudoh, and Hideo Aiso. (SM)2-II: a new version of the sparse matrix solving machine. *ACM SIGARCH Computer Architecture News*, 13(3):100–107, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Andre:1980:KAO

[ABL+80] F. Andre, J. P. Banâtre, H. Leroy, G. Paget, F. Ployette, and J. P. Routeau. KENSUR: An architecture oriented towards programming languages translation. *ACM SIGARCH Computer Architecture News*, 8(3):17–22, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ashenden:1987:LWP

[ABM87] Peter J. Ashenden, Chris J. Barter, and Chris D. Marlin. The Leopard workstation project. *ACM SIGARCH Computer Architecture News*, 15(4):40–51, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Acquaviva:2001:ECE

[ABR01] Andrea Acquaviva, Luca Benini, and Bruno Riccó. Energy characterization of embedded real-time operating systems. *ACM SIGARCH Computer Architecture News*, 29(5):13–18, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alvarez:1998:DDA

[ABSC98] Guillermo A. Alvarez, Walter A. Burkhard, Larry J. Stockmeyer, and Flaviu Cristian. Declustered disk array architectures with optimal and near-optimal parallelism. *ACM SIGARCH Computer Architecture News*, 26(3):109–120, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abe:1987:HPI

[ABY+87] S. Abe, T. Bandoh, S. Yamaguchi, K. Kurosawa, and K. Kiriyama. High performance integrated Prolog processor IPP. *ACM SIGARCH Computer Architecture News*, 15(2):100–107, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aggarwal:2007:ISI

[ABZ07] Aneesh Aggarwal, Pradip Bose, and Mohamed Zahran. Introduction to the special issue on the 2006 Reconfigurable and Adaptive Architecture Workshop. *ACM SIGARCH Computer Architecture News*, 35(3):1, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1989:ABS

[AC89] A. Agarwal and M. Cherian. Adaptive backoff synchronization techniques. *ACM SIGARCH Computer Architecture News*, 17(3):396–406, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aleen:2009:CAS

[AC09] Farhana Aleen and Nathan Clark. Commutativity analysis for software parallelization: letting program transformations see the big picture. *ACM SIGARCH Computer Architecture News*, 37(1):241–252, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Abadal:2016:WAF

[ACAAT16] Sergi Abadal, Albert Cabellos-Aparicio, Eduard Alarcon, and Josep Torrellas. WiSync: an architecture for fast synchronization through on-chip wireless communication. *ACM SIGARCH Computer Architecture News*, 44(2):3–17, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alverson:1990:TCS

[ACC+90] Robert Alverson, David Callahan, Daniel Cummings, Brian Koblenz, Allan Porterfield, and Burton Smith. The Tera computer system. *ACM*

SIGARCH Computer Architecture News, 18(3b):1–6, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Almasi:2003:DCD

[ACC+03] George Almási, Călin Caşcaval, José G. Castaños, Monty Denneau, Derek Lieber, José E. Moreira, and Henry S. Warren, Jr. Dissecting Cyclops: a detailed analysis of a multithreaded architecture. *ACM SIGARCH Computer Architecture News*, 31(1):26–38, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aldwairi:2005:CSM

[ACF05] Monther Aldwairi, Thomas Conte, and Paul Franzon. Configurable string matching hardware for speeding up intrusion detection. *ACM SIGARCH Computer Architecture News*, 33(1):99–107, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arulraj:2013:PRS

[ACJL13] Joy Arulraj, Po-Chun Chang, Guoliang Jin, and Shan Lu. Production-run software failure diagnosis via hardware performance counters. *ACM SIGARCH Computer Architecture News*, 41 (1):101–112, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Asthana:1994:EAM

[ACK94] Abhaya Asthana, Mark Cravatts, and Paul Krzyzanowski. An experimental active memory based I/O subsystem. *ACM SIGARCH Computer Architecture News*, 22(4):29–34, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arpaci:1995:EEC

[ACK+95] Remzi H. Arpaci, David E. Culler, Arvind Krishnamurthy, Steve G. Steinberg, and Katherine Yelick. Empirical evaluation of the CRAY-T3D: a compiler perspective. *ACM SIGARCH Computer Architecture News*, 23(2):320–331, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

ACM:1980:CPA

[ACM80] ACM, editor. *Conference Proceedings: 7th Annual Symposium on Computer Architecture, La Baule, France, 6–8 May 1980*, volume 8(3) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 1980. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. URL `http://portal.acm.org/toc.cfm?id=800090`.

ACM:1989:PAI

[ACM89] ACM, editor. *Proceedings of the 16th annual International Symposium on Computer Architecture, May 28–June 1, 1989, Jerusalem, Israel*, volume 17(3) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 1989. CODEN CANED2. ISBN 0-89791-319-1, 0-8186-5948-3 (microfiche), 0-8186-8948-X (casebound), 0-8186-1948-1 (paperback). ISSN 0163-5964; 0884-7495. LCCN QA76.9.A73 C65. URL http://portal.acm.org/toc.cfm?id=74925. ACM order number 415890. IEEE catalog number 89CH2705-2. IEEE Computer Society order number 1948.

ACM:1991:PIS

[ACM91] ACM, editor. *Proceedings of the 18th International Symposium on Computer Architecture: May 27–30, 1991, Toronto, Canada*, volume 19(3) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 1991. CODEN CANED2. ISBN 0-89791-394-9. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9 A73 I56 1991. URL http://portal.acm.org/toc.cfm?id=115952. ACM order number 415910. IEEE catalog number 91CH2995-9. IEEE Computer Society order number 2146.

ACM:1993:AIS

[ACM93a] ACM, editor. *20th Annual International Symposium on Computer Architecture ISCA '20, San Diego, CA, USA, May 16–19, 1993*, volume 21(2) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, May 1993. CODEN CANED2. ISBN 0-8186-3810-9 (paper), 0-8186-3811-7 (microfiche), 0-8186-3812-5 (case). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I58 1993. URL http://portal.acm.org/toc.cfm?id=165123. ACM order number 415930. IEEE catalog number 93CH3284-7. IEEE Computer Society Press order number 3810-02.

Staff:1993:BR

[ACM93b] ACM SIGARCH Computer Architecture News Staff. Book reviews. *ACM SIGARCH Computer Architecture News*, 21(1):39, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

ACM:1995:PAI

[ACM95] ACM, editor. *Proceedings, the 22nd Annual International Symposium on Computer Architecture: June 22–24, 1995, Santa Margherita Ligure, Italy*, volume 23(2) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 1995. CODEN CANED2. ISBN 0-89791-698-0. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I56 1995. URL `http://portal.acm.org/toc.cfm?id=223982`. ACM order number 415950. EEE catalog number 95CS35801. IEEE Computer Society order number PRO7677.

ACM:1996:PAI

[ACM96] ACM, editor. *Proceedings: the 23rd Annual International Symposium on Computer Architecture, May 22–24, 1996, Philadelphia, Pennsylvania*, volume 24(2) of *Computer architecture news*. ACM Press, New York, NY 10036, USA, 1996. ISBN 0-89791-786-3. LCCN QA76.9.A73 S97 1996. URL `http://portal.acm.org/toc.cfm?id=232973`. ACM order number 415960.

ACM:1997:AIS

[ACM97] ACM, editor. *The 24th Annual International Symposium on Computer Architecture, June 2–4, 1997, Denver, Colorado: conference proceedings*, volume 25(2) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 1997. CODEN CANED2. ISBN 0-89791-901-7. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 S94 1997. URL `http://portal.acm.org/toc.cfm?id=264107`. ACM order number 415974.

ACM:1998:PAI

[ACM98a] ACM, editor. *Proceedings: the 25th Annual International Symposium on Computer Architecture, June 27–July 1, 1998, Barcelona, Spain*, volume 26(3) of *Computer architecture news*. ACM Press, New York, NY 10036, USA, 1998. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

August:1998:IPS

[ACM+98b] David I. August, Daniel A. Connors, Scott A. Mahlke, John W. Sias, Kevin M. Crozier, Ben-Chung Cheng, Patrick R. Eaton, Qudus B. Olaniran, and Wen mei W. Hwu. Integrated predicated and speculative execution in the IMPACT EPIC architecture. *ACM SIGARCH Computer Architecture News*, 26(3):227–237, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

ACM:2000:PIS

[ACM00] ACM, editor. *Proceedings of*

the 27th International Symposium on Computer Architecture, June 12–14, 2000, Vancouver, British Columbia, Canada, volume 28(2) of *Computer architecture news*. ACM Press, New York, NY 10036, USA, 2000. ISBN 1-58113-232-8. LCCN QA76.9.A73 S97 2000. URL `http://portal.acm.org/toc.cfm?id=339647`.

ACM:2001:PIS

[ACM01] ACM, editor. *Proceedings of the 28th International Symposium on Computer Architecture, June 30–July 4, 2001, Göteborg, Sweden*, volume 29(2) of *Computer architecture news*. ACM Press, New York, NY 10036, USA, 2001. ISBN 0-7695-1162-7, 0-7695-1163-5, 0-7695-1164-3. LCCN QA76.9.A73 C64 2001. URL `http://portal.acm.org/toc.cfm?id=379240`.

ACM:2002:PIS

[ACM02a] ACM, editor. *Proceedings of the 29th International Symposium on Computer Architecture, May 25–29, 2002, Anchorage, Alaska*, volume 30(2) of *Computer architecture news*. ACM Press, New York, NY 10036, USA, 2002. ISBN 0-7695-1605-X, 0-7695-1606-8, 0-7695-1607-6. LCCN QA76.9.A73 S97 2002. URL `http://portal.acm.org/toc.cfm?id=545215`.

Ashok:2002:CMC

[ACM02b] Raksit Ashok, Saurabh Chheda, and Csaba Andras Moritz. Cool-Mem: combining statically speculative memory accessing with selective address translation for energy efficiency. *ACM SIGARCH Computer Architecture News*, 30 (5):133–143, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

ACM:2004:PAI

[ACM04] ACM, editor. *Proceedings: 31st Annual International Symposium on Computer Architecture: ISCA 2004: [June 19–23, 2004, München, Germany]*, volume 32(2) of *ACM SIGARCH Computer Architecture News*. ACM Press, New York, NY 10036, USA, 2004. CODEN CANED2. ISBN 0-7695-2143-6. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.5 .S84 2004. URL `http://portal.acm.org/toc.cfm?id=998680`. Includes CD-ROM.

Ahmad:2012:TOM

[ACRV12] Faraz Ahmad, Srimat T. Chakradhar, Anand Raghunathan, and T. N. Vijaykumar. Tarazu: optimizing MapReduce on heterogeneous clusters. *ACM SIGARCH Computer Architecture News*, 40(1):61–74, March 2012. AS-

PLOS '12 conference proceedings.

Ausavarungnirun:2012:SMS

[ACS+12] Rachata Ausavarungnirun, Kevin Kai-Wei Chang, Lavanya Subramanian, Gabriel H. Loh, and Onur Mutlu. Staged memory scheduling: achieving high performance and scalability in heterogeneous systems. *ACM SIGARCH Computer Architecture News*, 40 (3):416–427, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Abandah:1998:EAT

[AD98] Gheith A. Abandah and Edward S. Davidson. Effects of architectural and technological advances on the HP/ Convex Exemplar's memory and communication performance. *ACM SIGARCH Computer Architecture News*, 26(3):318–329, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ahn:2004:EIS

[ADK+04] Jung Ho Ahn, William J. Dally, Brucek Khailany, Ujval J. Kapasi, and Abhishek Das. Evaluating the Imagine Stream Architecture. *ACM SIGARCH Computer Architecture News*, 32(2):14, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Adler:1973:MCC

[Adl73] Louis S. Adler. A minicomputer configuration for CAI: a systems engineering view. *ACM SIGARCH Computer Architecture News*, 2(3): 10–19, October 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agrawal:2015:ASD

[ADP+15] Varun Agrawal, Abhiroop Dabral, Tapti Palit, Yongming Shen, and Michael Ferdman. Architectural support for dynamic linking. *ACM SIGARCH Computer Architecture News*, 43(1):691–702, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Azevedo:2013:ZME

[ADS+13] Rodolfo Azevedo, John D. Davis, Karin Strauss, Parikshit Gopalan, Mark Manasse, and Sergey Yekhanin. Zombie memory: extending memory lifetime by reviving dead blocks. *ACM SIGARCH Computer Architecture News*, 41 (3):452–463, June 2013. ICSA '13 conference proceedings.

Ahn:2013:DAS

[ADT13] Wonsun Ahn, Yuelu Duan, and Josep Torrellas. DeAliaser: alias speculation using atomic region support. *ACM*

SIGARCH Computer Architecture News, 41(1):167–180, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Aslot:2001:PCS

[AE01] Vishal Aslot and Rudolf Eigenmann. Performance characteristics of the SPEC OMP2001 benchmarks. *ACM SIGARCH Computer Architecture News*, 29(5):31–40, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agerwala:1973:CCL

[AF73] Tilak Agerwala and Mike Flynn. Comments on capabilities, limitations and "correctness" of Petri nets. *ACM SIGARCH Computer Architecture News*, 2(4):81–86, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ansari:2010:NES

[AFGM10] Amin Ansari, Shuguang Feng, Shantanu Gupta, and Scott Mahlke. Necromancer: enhancing system throughput by animating dead cores. *ACM SIGARCH Computer Architecture News*, 38(3):473–484, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annaratone:1990:KPP

[AFNV90] Marco Annaratone, Marco Fillo, Kiyoshi Nakabayashi, and Marc Viredaz. The K2 parallel processor: architecture and hardware implementation. *ACM SIGARCH Computer Architecture News*, 18(3a):92–101, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Afzal:1995:PMU

[Afz95] Tariq Afzal. Performance modeling using the Motorola PowerPC timing simulator. *ACM SIGARCH Computer Architecture News*, 23(4):9–18, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1998:RAM

[Aga98] Anant Agarwal. Retrospective: The MIT Alewife machine: architecture and performance. In ACM [ACM98a], pages 103–110. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Aral:1989:EDP

[AGS89] Z. Aral, I. Gerther, and G. Schaffer. Efficient debugging primitives for multiprocessors. *ACM SIGARCH Computer Architecture News*, 17(2):87–95, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annavaram:2005:MAL

[AGS05] Murali Annavaram, Ed Grochowski, and John Shen. Mitigating Amdahl's Law through EPI throttling. *ACM SIGARCH Computer Architecture News*, 33(2):298–309, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Allen:1994:AAR

[AGSY94] J. D. Allen, P. T. Gaughan, D. E. Schimmel, and S. Yalamanchili. Ariadne—an adaptive router for fault-tolerant multicomputers. *ACM SIGARCH Computer Architecture News*, 22(2):278–288, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2011:RSC

[AGT11] Rishi Agarwal, Pranav Garg, and Josep Torrellas. Rebound: scalable checkpointing for coherent shared memory. *ACM SIGARCH Computer Architecture News*, 39 (3):153–164, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Adve:1990:WON

[AH90] Sarita V. Adve and Mark D. Hill. Weak ordering—a new definition. *ACM SIGARCH Computer Architecture News*, 18(3a):2–14, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Adve:1998:RWO

[AH98a] Sarita V. Adve and Mark D. Hill. Retrospective: Weak ordering — a new definition. In ACM [ACM98a], pages 63–66. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Adve:1998:WON

[AH98b] Sarita V. Adve and Mark D. Hill. Weak ordering — a new definition. In ACM [ACM98a], pages 363–375. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984.

IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Andrus:2014:CNE

[AHA+14] Jeremy Andrus, Alexander Van't Hof, Naser AlDuaij, Christoffer Dall, Nicolas Viennot, and Jason Nieh. Cider: native execution of iOS apps on Android. *ACM SIGARCH Computer Architecture News*, 42(1):367–382, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Amani:2016:CVH

[AHC+16] Sidney Amani, Alex Hixon, Zilin Chen, Christine Rizkallah, Peter Chubb, Liam O'Connor, Joel Beeren, Yutaka Nagashima, Japheth Lim, Thomas Sewell, Joseph Tuong, Gabriele Keller, Toby Murray, Gerwin Klein, and Gernot Heiser. Cogent: Verifying high-assurance file system implementations. *ACM SIGARCH Computer Architecture News*, 44(2): 175–188, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Abdulla:2008:MCR

[AHK08] Parosh Aziz Abdulla, Frédéric Haziza, and Mats Kindahl. Model checking race-freeness. *ACM SIGARCH Computer Architecture News*, 36(5):72–79, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2000:CRV

[AHKB00] Vikas Agarwal, M. S. Hrishikesh, Stephen W. Keckler, and Doug Burger. Clock rate versus IPC: the end of the road for conventional microarchitectures. *ACM SIGARCH Computer Architecture News*, 28(2):248–259, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Adve:1991:DDR

[AHMN91] Sarita V. Adve, Mark D. Hill, Barton P. Miller, and Robert H. B. Netzer. Detecting data races on weak memory systems. *ACM SIGARCH Computer Architecture News*, 19(3):234–243, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arvind:1983:CMN

[AI83] Arvind and Robert A. Iannucci. A critique of multiprocessing von Neumann style. *ACM SIGARCH Computer Architecture News*, 11(3):426–436, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aichinger:1992:FBP

[Aic92] Barbara P. Aichinger. Futurebus+ as an I/O bus: profile B. *ACM SIGARCH Computer*

Architecture News, 20(2):300–307, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arakawa:2005:SXE

[AIK+05] F. Arakawa, M. Ishikawa, Y. Kondo, T. Kamei, M. Ozawa, O. Nishii, and T. Hattori. SH-X: an embedded processor core for consumer appliances. *ACM SIGARCH Computer Architecture News*, 33 (3):33–40, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Akamine:2011:IOE

[AIO+11] Takayuki Akamine, Kenta Inakagata, Yasunori Osana, Naoyuki Fujita, and Hideharu Amano. An implementation of out-of-order execution system for acceleration of computational fluid dynamics on FPGAs. *ACM SIGARCH Computer Architecture News*, 39 (4):50–55, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ahuja:1977:MMS

[AJ77] S. R. Ahuja and J. R. Jump. A modular memory scheme for array processing. *ACM SIGARCH Computer Architecture News*, 5(7):90–94, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Asthana:1988:IMS

[AJC+88] A. Asthana, H. V. Jagadish, J. A. Chandross, D. Lin, and S. C. Knauer. An intelligent memory system. *ACM SIGARCH Computer Architecture News*, 16(4):12–20, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ahn:2012:RHA

[AJH12] Jeongseob Ahn, Seongwook Jin, and Jaehyuk Huh. Revisiting hardware-assisted page walks for virtualized systems. *ACM SIGARCH Computer Architecture News*, 40 (3):476–487, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Albericio:2016:CIN

[AJH+16] Jorge Albericio, Patrick Judd, Tayler Hetherington, Tor Aamodt, Natalie Enright Jerger, and Andreas Moshovos. Cnvlutin: ineffectual-neuron-free deep neural network computing. *ACM SIGARCH Computer Architecture News*, 44(3):1–13, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Abts:2009:APP

[AJK+09] Dennis Abts, Natalie D. Enright Jerger, John Kim, Dan Gibson, and Mikko H. Lipasti.

Achieving predictable performance through better memory controller placement in many-core CMPs. *ACM SIGARCH Computer Architecture News*, 37(3):451–461, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arulraj:2014:LST

[AJL14] Joy Arulraj, Guoliang Jin, and Shan Lu. Leveraging the short-term memory of hardware to diagnose production-run software failures. *ACM SIGARCH Computer Architecture News*, 42 (1):207–222, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Arvind:1981:MPD

[AK81] Arvind and V. Kathail. A multiple processor data flow machine that supports generalized procedures. *ACM SIGARCH Computer Architecture News*, 9(3):??, 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). Proceedings of the 8th Annual Symposium on Computer Architecture.

Aydin:2000:UCL

[AK00] Hakan Aydin and David Kaeli. Using cache line coloring to perform aggressive procedure inlining. *ACM SIGARCH Computer Architecture News*, 28(1):62–71, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Altman:2001:WWB

[AK01a] Erik R. Altman and David Kaeli. WBT-2000: Workshop on Binary Translation 2000. *ACM SIGARCH Computer Architecture News*, 29(1):23–25, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Altman:2001:WBT

[AK01b] Erik R. Altman and David R. Kaeli. Workshop on Binary Translation 2001. *ACM SIGARCH Computer Architecture News*, 29(5):84–85, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Asgharimoghaddam:2016:SPE

[AK16] Hadi Asgharimoghaddam and Nam Sung Kim. SpinWise: a practical energy-efficient synchronization technique for CMPs. *ACM SIGARCH Computer Architecture News*, 44 (1):1–8, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Akturk:2017:AAA

[AK17] Ismail Akturk and Ulya R. Karpuzcu. AMNESIAC: Amnesic automatic computer. *ACM SIGARCH Computer Architecture News*, 45(1):811–824, March 2017. CO-

DEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alexander:1985:TBP

[AKB85] Cedell A. Alexander, William M. Keshlear, and Faye Briggs. Translation buffer performance in a UNIX environment. *ACM SIGARCH Computer Architecture News*, 13 (5):2–14, December 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arnould:1989:DNN

[AKB+89] Emmanuel Arnould, H. T. Kung, François Bitz, Robert D. Sansom, and Eric C. Cooperm. The design of nectar: a network backplane for heterogeneous multicomputers. *ACM SIGARCH Computer Architecture News*, 17(2):205–216, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alexander:1986:CMP

[AKCB86] Cedell Alexander, William Keshlear, Furrokh Cooper, and Faye Briggs. Cache memory performance in a Unix environment. *ACM SIGARCH Computer Architecture News*, 14(3):41–61, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arjomand:2016:BAP

[AKSD16] Mohammad Arjomand, Mahmut T. Kandemir, Anand Sivasubramaniam, and Chita R. Das. Boosting access parallelism to PCM-based main memory. *ACM SIGARCH Computer Architecture News*, 44(3):695–706, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Anderson:1974:VMM

[AL74] Judith A. Anderson and G. J. Lipovski. A virtual memory for microprocessors. *ACM SIGARCH Computer Architecture News*, 3(4):80–84, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Appel:1991:VMP

[AL91] Andrew W. Appel and Kai Li. Virtual memory primitives for user programs. *ACM SIGARCH Computer Architecture News*, 19(2):96–107, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Amano:2012:FBC

[AL12] Hideharu Amano and Wayne Luk. FPGA-based Connect6 solver with hardware-accelerated move refinement. *ACM SIGARCH Computer Architecture News*, 40(5):4–9, December 2012. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Albonesi:1998:DIC

[Alb98] David H. Albonesi. Dynamic IPC/clock rate optimization. *ACM SIGARCH Computer Architecture News*, 26(3):282–292, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anderson:1991:IAO

[ALBL91] Thomas E. Anderson, Henry M. Levy, Brian N. Bershad, and Edward D. Lazowska. The interaction of architecture and operating system design. *ACM SIGARCH Computer Architecture News*, 19(2):108–120, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alkalaj:1990:ASM

[ALE90] Leon Alkalaj, Tomás Lang, and Miloš Ercegovac. Architectural support for the management of tightly-coupled fine-grain goals in flat concurrent Prolog. *ACM SIGARCH Computer Architecture News*, 18(3a):292–301, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1990:APA

[ALKK90] Anant Agarwal, Beng-Hong Lim, David Kranz, and John Kubiatowicz. APRIL: a processor architecture for multiprocessing. *ACM SIGARCH Computer Architecture News*, 18(3a):104–114, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Allen:1976:CCS

[All76] Jonathan Allen. A course in computer structures. *ACM SIGARCH Computer Architecture News*, 4(4):28–32, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Allen:1992:BRC

[All92] Ken Allen. Book review: *Computing with Parallel Architectures: T.Node*, edited by D. Gassilloud and J. C. Grossetie (Kluwer Academic Publishers 1991). *ACM SIGARCH Computer Architecture News*, 20(4):65–66, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abramovici:1982:LSM

[ALM82] M. Abramovici, Y. H. Levendel, and P. R. Menon. A logic simulation machine. *ACM SIGARCH Computer Architecture News*, 10(3):148–157, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alverson:1993:BRH

[Alv93] Bob Alverson. Book review: *High-Speed Digital Design: A Handbook of Black Magic* by

Howard W. Johnson and Martin Graham (Prentice-Hall, 1993). *ACM SIGARCH Computer Architecture News*, 21 (5):85–86, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Atkinson:1987:DP

[AM87] Russell R. Atkinson and Edward M. McCreight. The dragon processor. *ACM SIGARCH Computer Architecture News*, 15(5):65–69, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arvind:2006:MMI

[AM06] Arvind Arvind and Jan-Willem Maessen. Memory model = instruction reordering + store atomicity. *ACM SIGARCH Computer Architecture News*, 34(2):29–40, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Awad:2016:SSZ

[AMH+16] Amro Awad, Pratyusa Manadhata, Stuart Haber, Yan Solihin, and William Horne. Silent Shredder: Zero-cost shredding for secure non-volatile main memory controllers. *ACM SIGARCH Computer Architecture News*, 44(2):263–276, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Azizi:2010:EPT

[AML+10] Omid Azizi, Aqeel Mahesri, Benjamin C. Lee, Sanjay J. Patel, and Mark Horowitz. Energy-performance tradeoffs in processor architecture and circuit design: a marginal cost analysis. *ACM SIGARCH Computer Architecture News*, 38(3):26–36, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aguilera:2012:AEW

[AMM+12] Marcos K. Aguilera, Dahlia Malkhi, Keith Marzullo, Alessandro Panconesi, Andrzej Pelc, and Roger Wattenhofer. Announcing the 2012 Edsger W. Dijkstra Prize in Distributed Computing. *ACM SIGARCH Computer Architecture News*, 40(4):1–2, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Azizi:2009:AEC

[AMPH09] Omid Azizi, Aqeel Mahesri, Sanjay J. Patel, and Mark Horowitz. Area-efficiency in CMP core design: co-optimization of microarchitecture and physical design. *ACM SIGARCH Computer Architecture News*, 37(2):56–65, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Amsbury:1983:CSA

[Ams83] Wayne Amsbury. A code-splitting algorithm. *ACM SIGARCH Computer Architecture News*, 11(5):13–21, December 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abts:2010:EPD

[AMW+10] Dennis Abts, Michael R. Marty, Philip M. Wells, Peter Klausler, and Hong Liu. Energy proportional datacenter networks. *ACM SIGARCH Computer Architecture News*, 38(3):338–347, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aga:2017:ISM

[AN17] Shaizeen Aga and Satish Narayanasamy. InvisiMem: Smart memory defenses for memory bus side channel. *ACM SIGARCH Computer Architecture News*, 45(2): 94–106, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Anderson:1973:IDP

[And73] George A. Anderson. Interconnecting a distributed processor system for avionics. *ACM SIGARCH Computer Architecture News*, 2(4):11–16, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anderson:1990:ACS

[And90] Noel W. Anderson. Amorphous computer system architecture: a preliminary look. *ACM SIGARCH Computer Architecture News*, 18 (1):51, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ando:1995:USE

[ANHN95] Hideki Ando, Chikako Nakanishi, Tetsuya Hara, and Masao Nakaya. Unconstrained speculative execution with predicated state buffering. *ACM SIGARCH Computer Architecture News*, 23(2):126–137, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2008:FCR

[ANMF08] Mayank Agarwal, Nitin Navale, Kshitiz Malik, and Matthew I. Frank. Fetch-criticality reduction through control independence. *ACM SIGARCH Computer Architecture News*, 36 (3):13–24, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annexstein:1991:FTH

[Ann91] Fred Annexstein. Fault tolerance in hypercube-derivative networks (preliminary version). *ACM SIGARCH Computer Architecture News*, 19(1):25–34, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:1981:ESM

[Ano81] Anonymous. Errata: Structured machine design: an ongoing experiment. *ACM SIGARCH Computer Architecture News*, 9(6):25, October 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:1982:LA

[Ano82] Anonymous. List of authors. *ACM SIGARCH Computer Architecture News*, 10 (3):335, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:1989:PTD

[Ano89] Anonymous. Pipelining through Dynamic Control ROM. *ACM SIGARCH Computer Architecture News*, 17(1):70–72, March 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:1999:MSF

[Ano99] Anonymous. In memoriam—SIGARCH founder: Caxton C. Foster. *ACM SIGARCH Computer Architecture News*, 27(3):1–3, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2004:AI

[Ano04a] Anonymous. Author index. *ACM SIGARCH Computer Architecture News*, 32 (2):387, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2004:C

[Ano04b] Anonymous. Committees. *ACM SIGARCH Computer Architecture News*, 32(2): 11, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2004:GCC

[Ano04c] Anonymous. General Co-Chair's message. *ACM SIGARCH Computer Architecture News*, 32(2):9, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2004:PCM

[Ano04d] Anonymous. Program Chair's message. *ACM SIGARCH Computer Architecture News*, 32(2):10, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2004:Ra

[Ano04e] Anonymous. Reviewers. *ACM SIGARCH Computer Architecture News*, 32(2):13, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:AI

[Ano05a] Anonymous. Author index. *ACM SIGARCH Computer Architecture News*, 33(2):556–557, May 2005. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:C

[Ano05b] Anonymous. Committees. *ACM SIGARCH Computer Architecture News*, 33(2):16, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:GCM

[Ano05c] Anonymous. General Chair's message. *ACM SIGARCH Computer Architecture News*, 33(2):9, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:MW

[Ano05d] Anonymous. MEDEA 2004 workshop. *ACM SIGARCH Computer Architecture News*, 33(3):??, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:PCM

[Ano05e] Anonymous. Program Chair's message. *ACM SIGARCH Computer Architecture News*, 33(2):x–xv, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2005:R

[Ano05f] Anonymous. Reviewers. *ACM SIGARCH Computer Architecture News*, 33(2):xvii–xviii, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2006:AI

[Ano06a] Anonymous. Author index. *ACM SIGARCH Computer Architecture News*, 34(2):391, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2006:MGC

[Ano06b] Anonymous. Message from the general chair. *ACM SIGARCH Computer Architecture News*, 34(2):10, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2006:MPC

[Ano06c] Anonymous. Message from the program chair. *ACM SIGARCH Computer Architecture News*, 34(2):11, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2006:R

[Ano06d] Anonymous. Reviewers. *ACM SIGARCH Computer Architecture News*, 34(2):14, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2006:SG

[Ano06e] Anonymous. SIGARCH guidelines. *ACM SIGARCH Computer Architecture News*, 34(2):17, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:AI

[Ano08a] Anonymous. Author index. *ACM SIGARCH Computer Architecture News*, 36(3):465–466, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:CA

[Ano08b] Anonymous. Cover art. *ACM SIGARCH Computer Architecture News*, 36(3):C1, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:MGC

[Ano08c] Anonymous. Message from the General Chairs. *ACM SIGARCH Computer Architecture News*, 36(3):x, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:MPC

[Ano08d] Anonymous. Message from the Program Chair. *ACM SIGARCH Computer Architecture News*, 36(3):xi, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:PI

[Ano08e] Anonymous. Publisher's information. *ACM SIGARCH Computer Architecture News*, 36(3):468, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anonymous:2008:R

[Ano08f] Anonymous. Reviewers. *ACM SIGARCH Computer Architecture News*, 36(3):xv–xviii, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2015:PPS

[ANS+15] Neha Agarwal, David Nellans, Mark Stephenson, Mike O'Connor, and Stephen W. Keckler. Page placement strategies for GPUs within heterogeneous memory systems. *ACM SIGARCH Computer Architecture News*, 43 (1):607–618, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Anthony:1991:BRT

[Ant91] Keith Anthony. Book review: *Technology Projection Modeling of Future Computer Systems* by Al Cutaia (Prentice-Hall, 1990). *ACM SIGARCH Computer Architecture News*, 19(1):152–153, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ando:2014:CSF

[AOM+14] Yuki Ando, Masataka Ogawa, Yuya Mizoguchi, Kouta Kumagai, Miaw Torng-Der, and Shinya Honda. A case study of FPGA Blokus Duo solver by system-level design. *ACM SIGARCH Computer*

Architecture News, 42(4):57–62, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Arnold:1976:HRM

[AP76] R. G. Arnold and E. W. Page. A hierarchical, restructurable multi-microprocessor architecture. *ACM SIGARCH Computer Architecture News*, 4(4): 40–45, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1993:CAC

[AP93] Anant Agarwal and Stephen D. Pudar. Column-associative caches: a technique for reducing the miss rate of direct-mapped caches. *ACM SIGARCH Computer Architecture News*, 21(2):179–190, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Anjan:1995:EFA

[AP95] K. V. Anjan and Timothy Mark Pinkston. An efficient, fully adaptive deadlock recovery scheme: DISHA. *ACM SIGARCH Computer Architecture News*, 23(2):201–210, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annavaram:2001:DPD

[APD01] Murali Annavaram, Jignesh M. Patel, and Edward S. Davidson. Data prefetching by dependence graph precomputation. *ACM SIGARCH Computer Architecture News*, 29 (2):52–61, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abad:2007:RRE

[APGP07] Pablo Abad, Valentin Puente, José Angel Gregorio, and Pablo Prieto. Rotary router: an efficient architecture for CMP interconnection networks. *ACM SIGARCH Computer Architecture News*, 35(2):116–125, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agrawal:2014:RHD

[APP+14] Sandeep R. Agrawal, Valentin Pistol, Jun Pang, John Tran, David Tarjan, and Alvin R. Lebeck. Rhythm: harnessing data parallel hardware for server workloads. *ACM SIGARCH Computer Architecture News*, 42(1): 19–34, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Annaratone:1989:ICS

[APR89] M. Annaratone, C. Pommerell, and R. Rühl. Interprocessor communication speed and performance in distributed-memory parallel processors. *ACM SIGARCH Computer Architecture News*, 17(3):315–324, June 1989.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Austin:1995:SDC

[APS95] Todd M. Austin, Dionisios N. Pnevmatikatos, and Gurindar S. Sohi. Streamlining data cache access with fast address calculation. *ACM SIGARCH Computer Architecture News*, 23(2):369–380, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Andre:1990:PSM

[APT90] Françoise André, Jean-Louis Pazat, and Henry Thomas. Pandore: a system to manage data distribution. *ACM SIGARCH Computer Architecture News*, 18(3b):380–388, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arnau:2012:BMG

[APX12] José-María Arnau, Joan-Manuel Parcerisa, and Polychronis Xekalakis. Boosting mobile GPU performance with a decoupled access/execute fragment processor. *ACM SIGARCH Computer Architecture News*, 40 (3):84–93, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Arnau:2014:ERF

[APX14] Jose-Maria Arnau, Joan-Manuel Parcerisa, and Polychronis Xekalakis. Eliminating redundant fragment shader executions on a mobile GPU via hardware memoization. *ACM SIGARCH Computer Architecture News*, 42 (3):529–540, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ahuja:1980:APP

[AR80] Sudhir R. Ahuja and Charles S. Roberts. An associative/parallel processor for partial match retrieval using superimposed codes. *ACM SIGARCH Computer Architecture News*, 8(3):218–227, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Abramson:1983:HSP

[AR83] David Abramson and John Rosenberg. Hardware support for program debuggers in a paged virtual memory. *ACM SIGARCH Computer Architecture News*, 11(2):8–19, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Annaratone:1989:PMC

[AR89] M. Annaratone and R. Rühl. Performance measurements on a commercial multiprocessor running parallel code. *ACM SIGARCH Computer*

Architecture News, 17(3):307–314, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aggarwal:2007:CIB

[ARJS07] Nidhi Aggarwal, Parthasarathy Ranganathan, Norman P. Jouppi, and James E. Smith. Configurable isolation: building high availability systems with commodity multi-core processors. *ACM SIGARCH Computer Architecture News*, 35(2):470–481, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Armstrong:1974:FMT

[Arm74] C. V. W. Armstrong. Functional memory techniques applied to the microprogrammed control of an associative processor. *ACM SIGARCH Computer Architecture News*, 3(4):34–40, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Adams:1991:PPP

[AS91a] Rod Adams and Gordon Steven. A parallel pipelined processor with conditional instruction execution. *ACM SIGARCH Computer Architecture News*, 19(1):135–142, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Akella:1991:MMI

[AS91b] Janaki Akella and Daniel P. Siewiorek. Modeling and measurement of the impact of Input/Output on system performance. *ACM SIGARCH Computer Architecture News*, 19(3):390–399, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alleyne:1992:EDN

[AS92a] Brian D. Alleyne and Isaac D. Scherson. Expanded delta networks for very large parallel computers. *ACM SIGARCH Computer Architecture News*, 20(2):436, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Austin:1992:DDA

[AS92b] Todd M. Austin and Gurindar S. Sohi. Dynamic dependency analysis of ordinary programs. *ACM SIGARCH Computer Architecture News*, 20(2):342–351, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Austin:1996:HBA

[AS96] Todd M. Austin and Gurindar S. Sohi. High-bandwidth address translation for multiple-issue processors. *ACM SIGARCH Computer Architecture News*, 24(2):158–167, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Arelakis:2014:SSC

[AS14] Angelos Arelakis and Per Stenstrom. SC2: a statistical compression cache scheme. *ACM SIGARCH Computer Architecture News*, 42(3): 145–156, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Agarwal:1986:ANT

[ASH86] A. Agarwal, R. L. Sites, and M. Horowitz. ATUM: a new technique for capturing address traces using microcode. *ACM SIGARCH Computer Architecture News*, 14(2):119–127, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1988:EDS

[ASHH88] A. Agarwal, R. Simoni, J. Hennessy, and M. Horowitz. An evaluation of directory schemes for cache coherence. *ACM SIGARCH Computer Architecture News*, 16(2):280–298, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:1998:EDS

[ASHH98] Anant Agarwal, Richard Simoni, John Hennessy, and Mark Horowitz. An evaluation of directory schemes for cache coherence. In ACM [ACM98a], pages 353–362. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Abu-Sufah:1985:PPT

[ASK85] Walid Abu-Sufah and Alex Y. Kwok. Performance prediction tools for Cedar: a multiprocessor supercomputer. *ACM SIGARCH Computer Architecture News*, 13(3):406–413, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aslam:1984:MDC

[Asl84] Javaid Aslam. Methodology for designing a computer architecture. *ACM SIGARCH Computer Architecture News*, 12(5):4–11, December 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

August:1999:PDL

[ASP+99] David I. August, John W. Sias, Jean-Michel Puiatti, Scott A. Mahlke, Daniel A. Connors, Kevin M. Crozier, and Wen mei W. Hwu. The program decision logic approach to predicated execution. *ACM SIGARCH Computer Architecture News*, 27(2):208–219, May 1999. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Anantaraman:2003:VSA

[ASP+03] Aravindh Anantaraman, Kiran Seth, Kaustubh Patil, Eric Rotenberg, and Frank Mueller. Virtual simple architecture (VISA): exceeding the complexity limit in safe real-time systems. *ACM SIGARCH Computer Architecture News*, 31(2):350–361, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ajay:2017:GIL

[ASR+17] Jerry Ajay, Chen Song, Aditya Singh Rathore, Chi Zhou, and Wenyao Xu. 3DGates: an instruction-level energy analysis and optimization of 3D printers. *ACM SIGARCH Computer Architecture News*, 45(1):419–433, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Assmann:1993:RPA

[Aßm93] Claus Aßmann. A RISC processor architecture with a versatile stack system. *ACM SIGARCH Computer Architecture News*, 21(5):63–70, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2011:FIF

[AT11] Rishi Agarwal and Josep Torrellas. FlexBulk: intelligently forming atomic blocks in blocked-execution multiprocessors to minimize squashes. *ACM SIGARCH Computer Architecture News*, 39(3):33–44, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Amamiya:1986:IEL

[ATHM86] M. Amamiya, M. Takesue, R. Hasegawa, and H. Mikami. Implementation and evaluation of a list-processing-oriented data flow machine. *ACM SIGARCH Computer Architecture News*, 14(2):10–19, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Atkins:1979:RAC

[Atk79] D. E. Atkins. Review of *Advances in Computer Architecture* by Glenford J. Myers. Wiley-Interscience Division of John Wiley and Sons 1978. *ACM SIGARCH Computer Architecture News*, 7(7):25–26, April 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Amit:2014:VMS

[ATS14] Nadav Amit, Dan Tsafrir, and Assaf Schuster. VSwapper: a memory swapper for virtualized environments.

ACM SIGARCH Computer Architecture News, 42(1):349–366, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Atta:2013:SBI

[ATT+13] Islam Atta, Pinar Tözün, Xin Tong, Anastasia Ailamaki, and Andreas Moshovos. STREX: boosting instruction cache reuse in OLTP workloads through stratified transaction execution. *ACM SIGARCH Computer Architecture News*, 41(3):273–284, June 2013. ICSA '13 conference proceedings.

Amin:2007:APA

[ATV+07] Ahmed M. Amin, Mithuna Thottethodi, T. N. Vijaykumar, Steven Wereley, and Stephen C. Jacobson. Aquacore: a programmable architecture for microfluidics. *ACM SIGARCH Computer Architecture News*, 35(2):254–265, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aupperle:1980:RIC

[Aup80] Ken Aupperle. A real innovation in computer architecture. *ACM SIGARCH Computer Architecture News*, 8(4):6–7, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ahmad:2010:JOI

[AV10] Faraz Ahmad and T. N. Vijaykumar. Joint optimization of idle and cooling power in data centers while maintaining response time. *ACM SIGARCH Computer Architecture News*, 38(1):243–256, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Avizienis:1983:FTF

[Avi83] Algirdas Avižienis. Framework for a taxonomy of fault-tolerance attributes in computer systems. *ACM SIGARCH Computer Architecture News*, 11(3):16–21, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Asmussen:2016:MHO

[AVN+16] Nils Asmussen, Marcus Völp, Benedikt Nöthen, Hermann Härtig, and Gerhard Fettweis. M3: a hardware/operating-system co-design to tame heterogeneous manycores. *ACM SIGARCH Computer Architecture News*, 44(2):189–203, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alameldeen:2004:ACC

[AW04] Alaa R. Alameldeen and David A. Wood. Adaptive cache compression for high-performance processors. *ACM SIGARCH Computer*

Architecture News, 32(2): 212, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Agarwal:2017:TAT

[AW17a] Neha Agarwal and Thomas F. Wenisch. Thermostat: Application-transparent page management for two-tiered main memory. *ACM SIGARCH Computer Architecture News*, 45 (1):631–644, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Altaf:2017:LHL

[AW17b] Muhammad Shoaib Bin Altaf and David A. Wood. LogCA: a high-level performance model for hardware accelerators. *ACM SIGARCH Computer Architecture News*, 45(2): 375–388, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Al-Wattar:2015:EMA

[AWAG15] Ahmed Al-Wattar, Shawki Areibi, and Gary Grewal. Efficient mapping and allocation of execution units to task graphs using an evolutionary framework. *ACM SIGARCH Computer Architecture News*, 43(4):46–51, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Alameldeen:2011:EEC

[AWC+11] Alaa R. Alameldeen, Ilya Wagner, Zeshan Chishti, Wei Wu, Chris Wilkerson, and Shih-Lien Lu. Energy-efficient cache design using variable-strength error-correcting codes. *ACM SIGARCH Computer Architecture News*, 39(3):461–472, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Angstadt:2016:RPP

[AWS16] Kevin Angstadt, Westley Weimer, and Kevin Skadron. RAPID programming of pattern-recognition processors. *ACM SIGARCH Computer Architecture News*, 44(2):593–605, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Awad:2017:OLO

[AWSS17] Amro Awad, Yipeng Wang, Deborah Shands, and Yan Solihin. ObfusMem: a low-overhead access obfuscation for trusted memories. *ACM SIGARCH Computer Architecture News*, 45(2):107–119, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Anderson:1988:SNN

[AWV88] James A. Anderson, Edward J. Wisniewski, and Susan R. Viscuso. Software for neural networks.

ACM SIGARCH Computer Architecture News, 16(1):26–36, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Amano:1983:SSM

[AYA83] Hideharu Amano, Takaichi Yoshida, and Hideo Aiso. (SM)2-Sparse Matrix Solving Machine. *ACM SIGARCH Computer Architecture News*, 11(3):213–220, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Aweke:2016:ASB

[AYQ+16] Zelalem Birhanu Aweke, Salessawi Ferede Yitbarek, Rui Qiao, Reetuparna Das, Matthew Hicks, Yossi Oren, and Todd Austin. ANVIL: Software-based protection against next-generation rowhammer attacks. *ACM SIGARCH Computer Architecture News*, 44(2):743–755, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Adams:1989:AIS

[AZ89] T. L. Adams and R. E. Zimmerman. An analysis of 8086 instruction set usage in MS DOS programs. *ACM SIGARCH Computer Architecture News*, 17(2):152–160, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Allu:2005:ERC

[AZ05] Bramha Allu and Wei Zhang. Exploiting the replication cache to improve performance for multiple-issue microprocessors. *ACM SIGARCH Computer Architecture News*, 33(3):63–71, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Alam:2017:DIY

[AZEE17] Hanna Alam, Tianhao Zhang, Mattan Erez, and Yoav Etsion. Do-it-yourself virtual memory translation. *ACM SIGARCH Computer Architecture News*, 45(2):457–468, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Allu:2006:ERC

[AZK06] B. Allu, W. Zhang, and M. Kandala. Exploiting the replication cache to improve cache read bandwidth cost effectively. *ACM SIGARCH Computer Architecture News*, 34(1):27–32, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Al-Zawawi:2007:TCI

[AZRRA07] Ahmed S. Al-Zawawi, Vimal K. Reddy, Eric Rotenberg, and Haitham H. Akkary. Transparent control independence (TCI). *ACM SIGARCH Computer Architecture News*, 35(2):448–459, May 2007.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baron:1974:ELC

[BA74] Janis Beitch Baron and D. E. Atkins. An educational laboratory in contemporary digital design. *ACM SIGARCH Computer Architecture News*, 3(4):225–231, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhuyan:1982:GCP

[BA82] Laxmi N. Bhuyan and Dharma P. Agrawal. A general class of processor interconnection strategies. *ACM SIGARCH Computer Architecture News*, 10(3):90–98, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banerjee:1984:FSA

[BA84] Prithviraj Banerjee and Jacob A. Abraham. Fault-secure algorithms for multiple-processor systems. *ACM SIGARCH Computer Architecture News*, 12(3):279–287, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burger:1997:STS

[BA97] Doug Burger and Todd M. Austin. The SimpleScalar tool set, version 2.0. *ACM SIGARCH Computer Architecture News*, 25(3):13–25, June 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bansal:2006:AGP

[BA06] Sorav Bansal and Alex Aiken. Automatic generation of peephole superoptimizers. *ACM SIGARCH Computer Architecture News*, 34(5):394–403, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Butler:1988:PAO

[BAB88] P. L. Butler, J. D. Allen, Jr., and D. W. Bouldin. Parallel architecture for OPS5. *ACM SIGARCH Computer Architecture News*, 16(2):452–457, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blumrich:1998:DCS

[BAC+98] Matthias A. Blumrich, Richard D. Alpert, Yuqun Chen, Douglas W. Clark, Stefanos N. Damianakis, Cezary Dubnicki, Edward W. Felten, Liviu Iftode, Kai Li, Margaret Martonosi, and Robert A. Shillner. Design choices in the SHRIMP system: an empirical study. *ACM SIGARCH Computer Architecture News*, 26(3):330–341, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bergan:2010:CCR

[BAD+10] Tom Bergan, Owen Anderson, Joseph Devietti, Luis Ceze, and Dan Grossman. CoreDet: a compiler and runtime system for deterministic multithreaded execution. *ACM SIGARCH Computer Architecture News*, 38(1):53–64, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ben-Asher:1989:DSA

[BAES89] Y. Ben-Asher, D. Egozi, and A. Schuster. 2-D SIMD algorithms in the perfect shuffle networks. *ACM SIGARCH Computer Architecture News*, 17(3):88–95, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baker:1991:PIS

[Bak91] Henry G. Baker. Precise instruction scheduling without a precise machine model. *ACM SIGARCH Computer Architecture News*, 19(6):4–8, December 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baker:1994:LLP

[Bak94] Henry G. Baker. Linear logic and permutation stacks— the Forth shall be first. *ACM SIGARCH Computer Architecture News*, 22(1):34–43, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banavar:2015:WEC

[Ban15] Guruduth Banavar. Watson and the era of cognitive computing. *ACM SIGARCH Computer Architecture News*, 43(1):413, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Barton:1982:SNH

[Bar82] Gene C. Barton. Sentry: a novel hardware implementation of classic operating system mechanisms. *ACM SIGARCH Computer Architecture News*, 10(3):140–147, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barroso:2011:WSC

[Bar11] Luiz Andre Barroso. Warehouse-scale computing: Entering the teenage decade. *ACM SIGARCH Computer Architecture News*, 39(3):??, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Baskett:1977:MMF

[Bas77] Forest Baskett. More on microprocessors of the future. *ACM SIGARCH Computer Architecture News*, 6(5):14–17, December 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bataille:1972:SOG

[Bat72] M. Bataille. Something old: the Gamma 60 the computer that was ahead of its time. *ACM SIGARCH Computer Architecture News*, 1(2): 10–15, April 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Batcher:1980:AMP

[Bat80] Kenneth E. Batcher. Architecture of a massively parallel processor. *ACM SIGARCH Computer Architecture News*, 8(3):168–173, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Batcher:1998:RAM

[Bat98a] Ken Batcher. Retrospective: Architecture of a massively parallel processor. In ACM [ACM98a], pages 15–16. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Batcher:1998:AMP

[Bat98b] Kenneth E. Batcher. Architecture of a massively parallel processor. In ACM [ACM98a], pages 174–179. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Baylor:1999:USS

[Bay99] Sandra Johnson Baylor. Unified scalable shared memory architectures. *ACM SIGARCH Computer Architecture News*, 27(1):10–21, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brundage:1974:PED

[BB74] R. E. Brundage and A. P. Batson. The performance enhancement of descriptor-based virtual memory systems through the use of associative registers. *ACM SIGARCH Computer Architecture News*, 3(4):85–90, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhandarkar:1990:VVA

[BB90] Dileep Bhandarkar and Richard Brunner. VAX vector architecture. *ACM SIGARCH Computer Architecture News*, 18(3a):204–215, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Binkert:2011:GS

[BBB+11] Nathan Binkert, Bradford Beckmann, Gabriel Black, Steven K. Reinhardt, Ali Saidi, Arkaprava Basu, Joel Hestness, Derek R. Hower, Tushar Krishna, Somayeh Sardashti, Rathijit Sen, Korey Sewell, Muhammad Shoaib, Nilay Vaish, Mark D. Hill, and David A. Wood. The `gem5` simulator. *ACM SIGARCH Computer Architecture News*, 39(2):1–7, May 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blaum:1994:EOS

[BBBM94] M. Blaum, J. Brady, J. Bruck, and J. Menon. EVEN-ODD: an optimal scheme for tolerating double disk failures in RAID architectures. *ACM SIGARCH Computer Architecture News*, 22(2):245–254, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Benker:1989:KKC

[BBD+89] H. Benker, J. M. Beacco, M. Dorochevsky, Th. Jeffré, A. Pöhlmann, J. Noyé, B. Poterie, J. C. Syre, O. Thibault, and G. Watzlawik. KCM: a knowledge crunching machine. *ACM SIGARCH Computer Architecture News*, 17(3):186–194, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bardine:2006:AEV

[BBFP06] Alessandro Bardine, Alessio Bechini, Pierfrancesco Foglia, and Cosimo Antonio Prete. Analysis of embedded video coder systems: a system-level approach. *ACM SIGARCH Computer Architecture News*, 34(1):71–76, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baylor:1994:PEM

[BBH94] Sandra Johnson Baylor, Caroline Benveniste, and Yarsun Hsu. Performance evaluation of a massively parallel I/O subsystem. *ACM SIGARCH Computer Architecture News*, 22(4):5–10, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhattacharyya:2008:ODT

[BBJ+08] Shuvra S. Bhattacharyya, Gordon Brebner, Jörn W. Janneck, Johan Eker, Carl von Platen, Marco Mattavelli, and Mickaël Raulet. OpenDF: a dataflow toolset for reconfigurable hardware and multicore systems. *ACM SIGARCH Computer Architecture News*, 36(5):29–35, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Batson:1976:DDA

[BBK76] A. P. Batson, R. E. Brundage, and J. P. Kearns. Design data for Algol-60 machines. *ACM SIGARCH Computer Architecture News*, 4(4):151–154, January 1976. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beltrametti:1988:CMM

[BBZ88] Monica Beltrametti, Kenneth Bobey, and John R. Zorbas. The control mechanism for the Myrias parallel computer system. *ACM SIGARCH Computer Architecture News*, 16 (4):21–30, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bodin:1990:LOH

[BC90a] François Bodin and François Charot. Loop optimization for horizontal microcoded machines. *ACM SIGARCH Computer Architecture News*, 18(3b):164–176, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bucher:1990:ACM

[BC90b] Ingrid Y. Bucher and Donald A. Calahan. Access conflicts in multiprocessor memories queueing models and simulation studies. *ACM SIGARCH Computer Architecture News*, 18(3b):428–438, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhandarkar:1991:PAC

[BC91] Dileep Bhandarkar and Douglas W. Clark. Performance from architecture: comparing a RISC and a CISC with similar hardware organization. *ACM SIGARCH Computer Architecture News*, 19(2):310–319, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boppana:1993:CAW

[BC93] Rajendra V. Boppana and Suresh Chalasani. A comparison of adaptive wormhole routing algorithms. *ACM SIGARCH Computer Architecture News*, 21(2):351–360, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Buonadonna:2002:QPI

[BC02] Philip Buonadonna and David Culler. Queue pair IP: a hybrid architecture for system area networks. *ACM SIGARCH Computer Architecture News*, 30(2):247–256, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brifault:2004:DCM

[BC04] K. Brifault and H. P. Charles. Data cache management on EPIC architecture: optimizing memory access for image processing. *ACM SIGARCH Computer Architecture News*, 32(3):35–42, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Borkar:1990:SSM

[BCC+90] Shekhar Borkar, Robert Cohn, George Cox, Thomas Gross, H. T. Kung, Monica Lam, Margie Levine, Brian Moore, Wire Moore, Craig Peterson, Jim Susman, Jim Sutton, John Urbanski, and Jon Webb. Supporting systolic and memory communication in iWarp. *ACM SIGARCH Computer Architecture News*, 18(3a):70–81, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burkowski:1989:ASS

[BCD89] F. J. Burkowski, G. V. Cormack, and G. D. P. Dueck. Architectural support for synchronous task communication. *ACM SIGARCH Computer Architecture News*, 17(2):40–53, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brunie:2012:SBW

[BCD12] Nicolas Brunie, Sylvain Collange, and Gregory Diamos. Simultaneous branch and warp interweaving for sustained GPU performance. *ACM SIGARCH Computer Architecture News*, 40(3): 49–60, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Bellas:2007:MSA

[BCDL07] Nikolaos Bellas, Sek M. Chai, Malcolm Dwyer, and Dan Linzmeier. Mapping streaming architectures on reconfigurable platforms. *ACM SIGARCH Computer Architecture News*, 35(3):2–8, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Borriello:1987:RVC

[BCDN87] Gaetano Borriello, Andrew R. Cherenson, Peter B. Danzig, and Michael N. Nelson. RISCs vs. CISCs for Prolog: a case study. *ACM SIGARCH Computer Architecture News*, 15(5):136–145, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bahar:1999:CSC

[BCG99] Iris Bahar, Brad Calder, and Dirk Grunwald. A comparison of software code reordering and victim buffers. *ACM SIGARCH Computer Architecture News*, 27(1):51–54, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boneti:2008:SCP

[BCG+08] Carlos Boneti, Francisco J. Cazorla, Roberto Gioiosa, Alper Buyuktosunoglu, Chen-Yong Cher, and Mateo Valero. Software-controlled priority characterization of POWER5 processor. *ACM SIGARCH Computer Architecture News*, 36(3):415–426, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banabic:2014:FTM

[BCG14] Radu Banabic, George Candea, and Rachid Guerraoui. Finding Trojan message vulnerabilities in distributed systems. *ACM SIGARCH Computer Architecture News*, 42 (1):113–126, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Berenbaum:1982:OSL

[BCL82] Alan D. Berenbaum, Michael W. Condry, and Priscilla M. Lu. The operating system and language support features of the BELLMACTM-32 microprocessor. *ACM SIGARCH Computer Architecture News*, 10(2):30–38, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barr:2010:TCS

[BCR10] Thomas W. Barr, Alan L. Cox, and Scott Rixner. Translation caching: skip, don't walk (the page table). *ACM SIGARCH Computer Architecture News*, 38(3):48–59, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barr:2011:SMS

[BCR11] Thomas W. Barr, Alan L. Cox, and Scott Rixner. SpecTLB: a mechanism for speculative address translation. *ACM SIGARCH Computer Architecture News*, 39 (3):307–318, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bruck:1991:RAE

[BCS91] Jehoshua Bruck, Robert Cypher, and Danny Soroker. Running algorithms efficiently on faulty hypercubes (extended abstract). *ACM SIGARCH Computer Architecture News*, 19(1):89–96, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bonamy:2011:PLI

[BCSB11] Robin Bonamy, Daniel Chillet, Olivier Sentieys, and Sebastien Bilavarn. Parallelism level impact on energy consumption in reconfigurable devices. *ACM SIGARCH Computer Architecture News*, 39 (4):104–105, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bennett:1990:ASC

[BCZ90] John K. Bennett, John B. Carter, and Willy Zwaenepoel. Adaptive software cache management for distributed shared memory architectures. *ACM SIGARCH Computer Architecture News*, 18(3a):125–134, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bose:1984:DIS

[BD84] Pradip Bose and Edward S. Davidson. Design of instruction set architectures for support of high-level languages. *ACM SIGARCH Computer Architecture News*, 12(3):198–206, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bitar:1986:MCS

[BD86] P. Bitar and A. M. Despain. Multiprocessor cache synchronization: issues, innovations, evolution. *ACM SIGARCH Computer Architecture News*, 14(2):424–433, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Benitez:1991:CGS

[BD91] Manuel E. Benitez and Jack W. Davidson. Code generation for streaming: an access/execute mechanism. *ACM SIGARCH Computer Architecture News*, 19(2):132–141, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barroso:1993:PCC

[BD93a] Luis André Barroso and Michel Dubois. The performance of cache-coherent ring-based multiprocessors. *ACM SIGARCH Computer Architecture News*, 21(2):268–277, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boyd:1993:HPM

[BD93b] Eric L. Boyd and Edward S. Davidson. Hierarchical performance modeling with MACS: a case study of the Convex C-240. *ACM SIGARCH Computer Architecture News*, 21(2):203–210, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balasubramonian:2001:DAP

[BDA01] Rajeev Balasubramonian, Sandhya Dwarkadas, and David H. Albonesi. Dynamically allocating processor resources between nearby and distant ILP. *ACM SIGARCH Computer Architecture News*, 29(2):26–37, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balasubramonian:2003:DMC

[BDA03] Rajeev Balasubramonian, Sandhya Dwarkadas, and David H. Albonesi. Dynamically managing the communication-parallelism trade-off in future clustered processors. *ACM SIGARCH Computer Architecture News*, 31(2):275–287, May 2003. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banescu:2010:MFP

[BdDPT10] Sebastian Banescu, Florent de Dinechin, Bogdan Pasca, and Radu Tudoran. Multipliers for floating-point double precision and beyond on FPGAs. *ACM SIGARCH Computer Architecture News*, 38(4):73–79, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bilir:1999:MSN

[BDH+99] E. Ender Bilir, Ross M. Dickson, Ying Hu, Manoj Plakal, Daniel J. Sorin, Mark D. Hill, and David A. Wood. Multicast snooping: a new coherence method using a multicast address network. *ACM SIGARCH Computer Architecture News*, 27(2):294–304, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Binkert:2011:ROF

[BDJ+11] Nathan Binkert, Al Davis, Norman P. Jouppi, Moray McLaren, Naveen Muralimanohar, Robert Schreiber, and Jung Ho Ahn. The role of optics in future high radix switch design. *ACM SIGARCH Computer Architecture News*, 39(3):437–448, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Blundell:2007:MFC

[BDLM07] Colin Blundell, Joe Devietti, E. Christopher Lewis, and Milo M. K. Martin. Making the fast case common and the uncommon case simple in unbounded transactional memory. *ACM SIGARCH Computer Architecture News*, 35 (2):24–34, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blake:2010:ETL

[BDMF10] Geoffrey Blake, Ronald G. Dreslinski, Trevor Mudge, and Krisztián Flautner. Evolution of thread-level parallelism in desktop applications. *ACM SIGARCH Computer Architecture News*, 38(3):302–313, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beetem:1985:GS

[BDW85] John Beetem, Monty Denneau, and Don Weingarten. The GF11 supercomputer. *ACM SIGARCH Computer Architecture News*, 13(3):108–115, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Breen:2003:AAA

[BE03] Kristopher C. Breen and Duncan G. Elliott. Aliasing and anti-aliasing in branch history table prediction. *ACM*

SIGARCH Computer Architecture News, 31(5):1–4, December 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beckmann:1995:HPM

[Bec95] Carl J. Beckmann. HTGL: a program modelling language. *ACM SIGARCH Computer Architecture News*, 23(3):3–10, June 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beeler:1984:BBB

[Bee84] Michael Beeler. Beyond the Baskett benchmark. *ACM SIGARCH Computer Architecture News*, 12(1):20–31, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bradlee:1991:ERP

[BEH91a] David G. Bradlee, Susan J. Eggers, and Robert R. Henry. The effect on RISC performance of register set size and structure versus code generation strategy. *ACM SIGARCH Computer Architecture News*, 19(3):330–339, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bradlee:1991:IRA

[BEH91b] David G. Bradlee, Susan J. Eggers, and Robert R. Henry. Integrating register allocation and instruction scheduling for RISCs. *ACM SIGARCH Computer Architecture News*, 19(2):122–131, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burrows:2000:EFV

[BEL+00] M. Burrows, U. Erlingson, S-T. A. Leung, M. T. Vandevoorde, C. A. Waldspurger, K. Walker, and W. E. Weihl. Efficient and flexible value sampling. *ACM SIGARCH Computer Architecture News*, 28(5):160–167, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Benzie:1982:BRR

[Ben82] Thomas Benzie. Book reviews: Review of *Microcomputer Architecture and Programming* by John F. Wakerly, John Wiley & Sons, Inc., 1981. *ACM SIGARCH Computer Architecture News*, 10(5):23, September 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Berkling:1974:RLR

[Ber74] K. J. Berkling. Reduction languages for reduction machines. *ACM SIGARCH Computer Architecture News*, 3 (4):133–140, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Berndt:1976:ECA

[Ber76] Helmut Berndt. Evolutionary computer architecture: the Unidata 7.000 series. *ACM SIGARCH Computer Architecture News*, 5(1):10–16, April 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Berstis:1980:SPD

[Ber80] Viktors Berstis. Security and protection of data in the IBM System/38. *ACM SIGARCH Computer Architecture News*, 8(3):245–252, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bernecky:1991:BRMb

[Ber91a] Robert Bernecky. Book review: *Multiprocessor Performance* by Erol Gelenbe (J. Wiley & Sons, Chichester, England). *ACM SIGARCH Computer Architecture News*, 19(1):156–157, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bernecky:1991:BRMa

[Ber91b] Robert Bernecky. Book review: *Multiprocessors* by Daniel Tabak (Prentice Hall, Englewood Cliffs, NJ). *ACM SIGARCH Computer Architecture News*, 19(1):154–156, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bernecky:1991:BRP

[Ber91c] Robert Bernecky. Book review: *Past, Present, Parallel: A Survey of Available Parallel Computing Systems* by Arthur Trew & Greg Wilson (Eds.), (Springer-Verlag 1991). *ACM SIGARCH Computer Architecture News*, 19 (6):24–25, December 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bettcher:1973:TSR

[Bet73] C. W. Bettcher. Thread standardization and relative cost. *ACM SIGARCH Computer Architecture News*, 2(1): 9, January 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhandarkar:1973:MCM

[BF73] Dileep P. Bhandarkar and Samuel H. Fuller. Markov chain models for analyzing memory interference in multiprocessor computer systems. *ACM SIGARCH Computer Architecture News*, 2(4):1–6, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bisiani:1987:ASM

[BF87] Roberto Bisiani and Alessandro Forin. Architectural support for multilanguage parallel programming on heterogeneous systems. *ACM SIGARCH Computer Architecture News*, 15(5):21–30, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brochard:1990:DAH

[BF90] Luigi Brochard and Alex Freau. Designing algorithms on hierarchical memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 18(3b):414–427, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhatotia:2015:ITL

[BFA+15] Pramod Bhatotia, Pedro Fonseca, Umut A. Acar, Björn B. Brandenburg, and Rodrigo Rodrigues. iThreads: a threading library for parallel incremental computation. *ACM SIGARCH Computer Architecture News*, 43(1):645–659, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bunda:1993:BVB

[BFAJ93] John Bunda, Don Fussell, W. C. Athas, and Roy Jenevein. 16-bit vs. 32-bit instructions for pipelined microprocessors. *ACM SIGARCH Computer Architecture News*, 21(2):237–246, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bardine:2007:IPE

[BFG+07] A. Bardine, P. Foglia, G. Gabrielli, C. A. Prete, and P. Stenström. Improving power efficiency of D-NUCA caches. *ACM SIGARCH Computer Architecture News*, 35(4):53–58, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bartolini:2006:MPD

[BFGP06] S. Bartolini, P. Foglia, R. Giorgi, and C. A. Prete. Memory performance: dealing with applications, systems and architecture. *ACM SIGARCH Computer Architecture News*, 34(1):1–2, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bechini:2003:FGD

[BFP03] Alessio Bechini, Pierfrancesco Foglia, and Cosimo Antonio Prete. Fine-grain design space exploration for a cartographic SoC multiprocessor. *ACM SIGARCH Computer Architecture News*, 31(1):85–92, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bartolini:2005:GEI

[BFP05] S. Bartolini, P. Foglia, and C. A. Prete. Guests editors' introduction. *ACM SIGARCH Computer Architecture News*, 33(3):1–2, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bartolini:2007:MPD

[BFP07] S. Bartolini, P. Foglia, and C. A. Prete. MEmory performance: DEaling with applications, systems and architecture. *ACM SIGARCH Computer Architecture News*, 35(4):4–5, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Biswas:2009:MEM

[BFS+09] Susmit Biswas, Diana Franklin, Alan Savage, Ryan Dixon, Timothy Sherwood, and Frederic T. Chong. Multi-execution: multicore caching for data-similar executions. *ACM SIGARCH Computer Architecture News*, 37(3):164–173, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brassard:1980:PBC

[BG80] Jean-Paul Brassard and Jan Gecsei. Path building in cellular partitioning networks. *ACM SIGARCH Computer Architecture News*, 8(3):44–50, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banerjee:1984:FEL

[BG84] Utpal Banerjee and Daniel D. Gajski. Fast execution of loops with if statements. *ACM SIGARCH Computer Architecture News*, 12(3):126–132, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barroso:1998:MSC

[BGB98] Luiz André Barroso, Kourosh Gharachorloo, and Edouard Bugnion. Memory system characterization of commercial workloads. *ACM SIGARCH Computer Architecture News*, 26(3):3–14, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Basu:2013:EVM

[BGC+13] Arkaprava Basu, Jayneel Gandhi, Jichuan Chang, Mark D. Hill, and Michael M. Swift. Efficient virtual memory for big memory servers. *ACM SIGARCH Computer Architecture News*, 41(3):237–248, June 2013. ICSA '13 conference proceedings.

Bobba:2008:TEE

[BGH+08] Jayaram Bobba, Neelam Goyal, Mark D. Hill, Michael M. Swift, and David A. Wood. TokenTM: Efficient execution of large transactions with hardware transactional memory. *ACM SIGARCH Computer Architecture News*, 36(3):127–138, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burger:1996:MBL

[BGK96] Doug Burger, James R. Goodman, and Alain Kägi. Memory bandwidth limitations of future microprocessors. *ACM SIGARCH Computer Architecture News*, 24(2):78–89, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barroso:2000:PSA

[BGM+00] Luiz André Barroso, Kourosh Gharachorloo, Robert McNamara, Andreas Nowatzyk, Shaz Qadeer, Barton Sano, Scott Smith, Robert Stets, and Ben Verghese. Piranha: a scalable architecture based on single-chip multiprocessing. *ACM SIGARCH Computer Architecture News*, 28(2):282–293, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Branovic:2004:WCE

[BGM04] I. Branovic, R. Giorgi, and E. Martinelli. A workload characterization of elliptic curve cryptography methods in embedded environments. *ACM SIGARCH Computer Architecture News*, 32(3):27–34, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bartolini:2001:PAC

[BGP+01] S. Bartolini, R. Giorgi, J. Protic, C. A. Prete, and M. Valero. Parallel architecture and compilation techniques: selection of workshop papers, Guest Editors' introduction. *ACM SIGARCH Computer Architecture News*, 29(5):9–12, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Banerjee:1978:UDM

[BH78] Jayanta Banerjee and David K. Hsiao. The use of a database machine for supporting relational databases. *ACM SIGARCH Computer Architecture News*, 7(2):91–98, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beth:1991:RCI

[BH91] Thomas Beth and Volker Hatz. A restricted crossbar implementation and its applications. *ACM SIGARCH Computer Architecture News*, 19(6):12–16, December 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhandarkar:1997:RVC

[Bha97] Dileep Bhandarkar. RISC versus CISC: a tale of two chips. *ACM SIGARCH Computer Architecture News*, 25(1):1–12, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhattacharjee:2017:TTP

[Bha17] Abhishek Bhattacharjee. Translation-triggered prefetching. *ACM SIGARCH Computer Architecture News*, 45(1):63–76, March 2017. CO-

DEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Beivide:1987:OMC

[BHBL87] R. Beivide, E. Herrada, J. L. Balcazar, and J. Labarta. Optimized mesh-connected networks for SIMD and MIMD architectures. *ACM SIGARCH Computer Architecture News*, 15(2):163–170, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boyapati:2017:AND

[BHM+17] Rahul Boyapati, Jiayi Huang, Pritam Majumder, Ki Hwan Yum, and Eun Jung Kim. APPROX-NoC: a data approximation framework for network-on-chip architectures. *ACM SIGARCH Computer Architecture News*, 45(2): 666–677, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bilardi:1991:OVA

[BHS91] Ginfranco Bilardi, Scot W. Hornick, and Majid Sarrafzadeh. Optimal VLSI architectures for multidimensional DFT (preliminary version). *ACM SIGARCH Computer Architecture News*, 19(1):45–52, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Basu:2012:RMR

[BHS12] Arkaprava Basu, Mark D. Hill, and Michael M. Swift. Reducing memory reference energy with opportunistic virtual caching. *ACM SIGARCH Computer Architecture News*, 40(3):297–308, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Bhujade:1983:DAC

[Bhu83] M. R. Bhujade. On the design of Always Compatible Instruction Set Architecture(ACISA). *ACM SIGARCH Computer Architecture News*, 11(5):28–30, December 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhuyan:1984:PLC

[Bhu84] Laxmi N. Bhuyan. On the performance of loosely coupled multiprocessors. *ACM SIGARCH Computer Architecture News*, 12(3):256–262, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bojnordi:2012:PPM

[BI12] Mahdi Nazm Bojnordi and Engin Ipek. PARDIS: a programmable memory controller for the DDRx interfacing standards. *ACM SIGARCH Computer Architecture News*, 40 (3):13–24, June 2012. CO-

DEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Bianchini:2017:IDE

[Bia17] Ricardo Bianchini. Improving datacenter efficiency. *ACM SIGARCH Computer Architecture News*, 45(1): 327, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bic:1984:ELP

[Bic84] Lubomir Bic. Execution of logic programs on a dataflow architecture. *ACM SIGARCH Computer Architecture News*, 12(3):290–296, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bitar:1989:BRR

[Bit89] Philip Bitar. Book reviews: Review of *Parallel Execution of Logic Programs* by John Conery. Kluwer Academic Publishers 1987. *ACM SIGARCH Computer Architecture News*, 17(1):81–82, March 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhandarkar:1978:STT

[BJ78] Dileep P. Bhandarkar and J. Egil Juliussen. Semiconductor technology: trends and implications. *ACM SIGARCH Computer Architecture News*, 7(1):4–14, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhargava:2003:IDC

[BJ03] Ravi Bhargava and Lizy K. John. Improving dynamic cluster assignment for clustered trace cache processors. *ACM SIGARCH Computer Architecture News*, 31(2):264–274, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Badr:2014:SST

[BJ14] Mario Badr and Natalie Enright Jerger. SynFull: synthetic traffic models capturing cache coherent behaviour. *ACM SIGARCH Computer Architecture News*, 42(3): 109–120, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Belhadj:2013:CRW

[BJL+13] Bilel Belhadj, Antoine Joubert, Zheng Li, Rodolphe Héliot, and Olivier Temam. Continuous real-world inputs can open up alternative accelerator designs. *ACM SIGARCH Computer Architecture News*, 41(3):1–12, June 2013. ICSA '13 conference proceedings.

Bekerman:1999:CLA

[BJR+99] Michael Bekerman, Stephan Jourdan, Ronny Ronen, Gilad Kirshenboim, Lihu Rappoport, Adi Yoaz, and Uri Weiser. Correlated load-address predictors. *ACM SIGARCH Computer Architecture News*, 27(2):54–63, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beigel:1991:PNI

[BK91] Richard Beigel and Clydel P. Kruskal. Processor networks and interconnection networks without long wires (extended abstract). *ACM SIGARCH Computer Architecture News*, 19(1):15–24, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Belayneh:1996:DNBa

[BK96a] Samson Belayneh and David R. Kaeli. A discussion on non-blocking/lockup-free caches. *ACM SIGARCH Computer Architecture News*, 24(3):18–25, June 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Belayneh:1996:DNBb

[BK96b] Samson Belayneh and David R. Kaeli. A discussion on non-blocking/lockup-free caches. *ACM SIGARCH Computer Architecture News*, 24(4):16, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burnside:2005:CCP

[BK05] Matthew Burnside and Angelos D. Keromytis. The case for crypto protocol awareness inside the OS kernel. *ACM SIGARCH Computer Architecture News*, 33(1):58–64, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balevic:2011:KAD

[BK11] Ana Balevic and Bart Kienhuis. KPN2GPU: an approach for discovery and exploitation of fine-grain data parallelism in process networks. *ACM SIGARCH Computer Architecture News*, 39(4):66–71, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Buyuktosunoglu:2003:EEC

[BKAB03] Alper Buyuktosunoğlu, Tejas Karkhanis, David H. Albonesi, and Pradip Bose. Energy efficient co-adaptive instruction fetch and issue. *ACM SIGARCH Computer Architecture News*, 31(2):147–156, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bugge:1990:TDS

[BKB90] Håkon O. Bugge, Ernst H. Kristiansen, and Bjørn O.

Bakka. Trace-driven simulations for a two-level cache design in open bus systems. *ACM SIGARCH Computer Architecture News*, 18(3a): 250–259, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bucur:2014:PSE

[BKC14] Stefan Bucur, Johannes Kinder, and George Candea. Prototyping symbolic execution engines for interpreted languages. *ACM SIGARCH Computer Architecture News*, 42(1):239–254, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Burger:1997:DA

[BKG97] Doug Burger, Stefanos Kaxiras, and James R. Goodman. DataScalar architectures. *ACM SIGARCH Computer Architecture News*, 25(2):338–349, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bornholt:2016:SCF

[BKL+16] James Bornholt, Antoine Kaufmann, Jialin Li, Arvind Krishnamurthy, Emina Torlak, and Xi Wang. Specifying and checking file system crash-consistency models. *ACM SIGARCH Computer Architecture News*, 44 (2):83–98, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Burckhardt:2010:RSP

[BKMN10] Sebastian Burckhardt, Pravesh Kothari, Madanlal Musuvathi, and Santosh Nagarakatte. A randomized scheduler with probabilistic guarantees of finding bugs. *ACM SIGARCH Computer Architecture News*, 38(1):167–178, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barach:1994:HVF

[BKS+94] David Barach, Jaspal Kohli, John Slice, Marc Spaulding, Rajeev Bharadhwaj, Don Hudson, Cliff Neighbors, Nirmal Saxena, and Rolland Crunk. HALSIM—a very fast SPARC V9 behavioral model. *ACM SIGARCH Computer Architecture News*, 22(1):52–58, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balensiefer:2005:EFI

[BKSO05] Steven Balensiefer, Lucas Kregor-Stickles, and Mark Oskin. An evaluation framework and instruction set architecture for ion-trap based quantum micro-architectures. *ACM SIGARCH Computer Architecture News*, 33(2):186–196, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beck:1987:VAM

[BKT87] Bob Beck, Bob Kasten, and Shreekant Thakkar. VLSI assist for a multiprocessor. *ACM SIGARCH Computer Architecture News*, 15(5):10–20, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Borg:1990:GAV

[BKW90] Anita Borg, R. E. Kessler, and David W. Wall. Generation and analysis of very long address traces. *ACM SIGARCH Computer Architecture News*, 18(3a):270–279, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blumrich:1994:VMM

[BLA+94] M. A. Blumrich, K. Li, R. Alpert, C. Dubnicki, E. W. Felten, and J. Sandberg. Virtual memory mapped network interface for the SHRIMP multicomputer. *ACM SIGARCH Computer Architecture News*, 22(2):142–153, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blumrich:1998:VMM

[BLA+98a] Matthias A. Blumrich, Kai Li, Richard Alpert, Cezary Dubnicki, Edward W. Felten, and Jonathan Sandberg. Virtual memory mapped network interface for the SHRIMP multicomputer. In ACM [ACM98a], pages 473–484. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Blumrich:1998:RVM

[BLA+98b] Matthias A. Blumrich, Kai Li, Richard D. Alpert, Cezary Dubnicki, Edward W. Felten, and Jonathan Sandberg. Retrospective: Virtual memory mapped network interface for the SHRIMP multicomputer. In ACM [ACM98a], pages 92–94. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Barua:1999:MCM

[BLAA99] Rajeev Barua, Walter Lee, Saman Amarasinghe, and Anant Agarwal. Maps: a compiler-managed memory system for raw machines. *ACM SIGARCH Computer Architecture News*, 27(2):4–15, May 1999. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bornholt:2016:DBA

[BLC+16] James Bornholt, Randolph Lopez, Douglas M. Carmean, Luis Ceze, Georg Seelig, and Karin Strauss. A DNA-based archival storage system. *ACM SIGARCH Computer Architecture News*, 44(2):637–649, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bai:2017:VRE

[BLI17] Yuxin Bai, Victor W. Lee, and Engin Ipek. Voltage regulator efficiency aware power management. *ACM SIGARCH Computer Architecture News*, 45(1):825–838, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Barbalace:2017:BBH

[BLJ+17] Antonio Barbalace, Robert Lyerly, Christopher Jelesnianski, Anthony Carno, Ho-Ren Chuang, Vincent Legout, and Binoy Ravindran. Breaking the boundaries in heterogeneous-ISA datacenters. *ACM SIGARCH Computer Architecture News*, 45 (1):645–659, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bonuccelli:1983:VTM

[BLL+83] M. A. Bonuccelli, E. Lodi, F. Luccio, P. Maestrini, and L. Pagli. A VLSI tree machine for relational data bases. *ACM SIGARCH Computer Architecture News*, 11 (3):67–73, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bush:1976:SIS

[BLs+76] J. A. Bush, G. J. Lipovski, S. Y. W. su, J. K. Watson, and S. J. Ackerman. Some implementations of segment sequential functions. *ACM SIGARCH Computer Architecture News*, 4(4):178–185, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bilas:1999:UNI

[BLS99] Angelos Bilas, Cheng Liao, and Jaswinder Pal Singh. Using network interface support to avoid asynchronous protocol processing in shared virtual memory systems. *ACM SIGARCH Computer Architecture News*, 27(2):282–293, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bagrodia:1991:EIH

[BM91] Rajive Bagrodia and Sharad Mathur. Efficient Implementation of high-level parallel programs. *ACM SIGARCH Computer Architecture News*, 19(2):142–151, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bahar:2001:PER

[BM01] R. Iris Bahar and Srilatha Manne. Power and energy reduction via pipeline balancing. *ACM SIGARCH Computer Architecture News*, 29(2):218–229, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bond:2006:BBE

[BM06] Michael D. Bond and Kathryn S. McKinley. Bell: bit-encoding online memory leak detection. *ACM SIGARCH Computer Architecture News*, 34(5):61–72, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhattacharjee:2009:TCP

[BM09a] Abhishek Bhattacharjee and Margaret Martonosi. Thread criticality predictors for dynamic performance, power, and resource management in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 37(3):290–301, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bond:2009:LP

[BM09b] Michael D. Bond and Kathryn S. McKinley. Leak pruning. *ACM SIGARCH Computer Architecture News*, 37(1):277–288, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Burcea:2009:PBV

[BM09c] Ioana Burcea and Andreas Moshovos. Phantom-BTB: a virtualized branch target buffer design. *ACM SIGARCH Computer Architecture News*, 37(1):313–324, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bhattacharjee:2010:ICC

[BM10] Abhishek Bhattacharjee and Margaret Martonosi. Inter-core cooperative TLB for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 38(1):359–370, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burke:2000:ASF

[BMA00] Jerome Burke, John McDonald, and Todd Austin. Architectural support for fast symmetric-key cryptography. *ACM SIGARCH Computer Architecture News*, 28(5):178–189, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Berger:2000:HSM

[BMBW00] Emery D. Berger, Kathryn S. McKinley, Robert D. Blumofe, and Paul R. Wilson. Hoard: a scalable memory allocator for multithreaded applications. *ACM SIGARCH Computer Architecture News*, 28 (5):117–128, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balkind:2016:OOS

[BMF+16] Jonathan Balkind, Michael McKeown, Yaosheng Fu, Tri Nguyen, Yanqi Zhou, Alexey Lavrov, Mohammad Shahrad, Adi Fuchs, Samuel Payne, Xiaohua Liang, Matthew Matl, and David Wentzlaff. OpenPiton: an open source manycore research framework. *ACM SIGARCH Computer Architecture News*, 44 (2):217–232, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bornholt:2014:UFO

[BMM14] James Bornholt, Todd Mytkowicz, and Kathryn S. McKinley. Uncertain< t>: a first-order type for uncertain data. *ACM SIGARCH Computer Architecture News*, 42 (1):51–66, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Berekovic:2004:SCS

[BMP04a] Mladen Berekovic, Sören Moch, and Peter Pirsch. A scalable, clustered SMT processor for digital signal processing. *ACM SIGARCH Computer Architecture News*, 32(3):62–69, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bronevetsky:2004:ALC

[BMP+04b] Greg Bronevetsky, Daniel Marques, Keshav Pingali, Peter Szwed, and Martin Schulz. Application-level checkpointing for shared memory programs. *ACM SIGARCH Computer Architecture News*, 32 (5):235–247, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bobba:2007:PPH

[BMV+07] Jayaram Bobba, Kevin E. Moore, Haris Volos, Luke Yen, Mark D. Hill, Michael M. Swift, and David A. Wood. Performance pathologies in hardware transactional memory. *ACM SIGARCH Computer Architecture News*, 35 (2):81–91, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blundell:2009:IPT

[BMW09] Colin Blundell, Milo M. K. Martin, and Thomas F. Wenisch. InvisiFence: performance-transparent memory ordering in conventional multiprocessors. *ACM SIGARCH Computer Architecture News*, 37(3):233–244, June 2009.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boku:1988:IHP

[BNA88] T. Boku, S. Nomura, and H. Amano. IMPULSE: a high performance processing unit for multiprocessors for scientific calculation. *ACM SIGARCH Computer Architecture News*, 16(2):365–372, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brown:2016:HBS

[BNE16] Fraser Brown, Andres Nötzli, and Dawson Engler. How to build static checking systems using orders of magnitude less code. *ACM SIGARCH Computer Architecture News*, 44 (2):143–157, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Burnim:2011:SCS

[BNS11] Jacob Burnim, George Necula, and Koushik Sen. Specifying and checking semantic atomicity for multithreaded programs. *ACM SIGARCH Computer Architecture News*, 39(1):79–90, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bird:1978:TFI

[BNT78] R. M. Bird, J. B. Newsbaum, and J. L. Trefftzs. Text file inversion: an evaluation. *ACM SIGARCH Computer Architecture News*, 7(2):42–50, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baugh:2008:UHM

[BNZ08] Lee Baugh, Naveen Neelakantam, and Craig Zilles. Using hardware memory protection to build a high-performance, strongly-atomic hybrid transactional memory. *ACM SIGARCH Computer Architecture News*, 36(3):115–126, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bull:2001:MSO

[BO01] J. Mark Bull and Darragh O'Neill. A microbenchmark suite for OpenMP 2.0. *ACM SIGARCH Computer Architecture News*, 29(5):41–48, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bond:2013:GDG

[Bon13] Michael Bond. GPUDet: a deterministic GPU architecture. *ACM SIGARCH Computer Architecture News*, 41 (1):1–12, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bose:1984:UEC

[Bos84] Bella Bose. Unidirectional error correction/detection for

VLSI memory. *ACM SIGARCH Computer Architecture News*, 12(3):242–244, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boulaye:1975:SDS

[Bou75] Guy. G. Boulaye. Structured design for structured computer architecture. *ACM SIGARCH Computer Architecture News*, 4(2):8–17, June 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bowyer:1979:BRS

[Bow79] Kevin W. Bowyer. Book review of *The Structure of Computers and Computations: Volume One* by David J. Kuck. John Wiley & Sons 1978. *ACM SIGARCH Computer Architecture News*, 7(7): 27–30, April 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bartolini:2004:PIS

[BP04] S. Bartolini and C. A. Prete. A proposal for input-sensitivity analysis of profile-driven optimizations on embedded applications. *ACM SIGARCH Computer Architecture News*, 32(3):70–77, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bisiani:1990:PDS

[BR90] Roberto Bisiani and Mosur Ravishankar. PLUS: a distributed shared-memory system. *ACM SIGARCH Computer Architecture News*, 18(3a):115–124, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Boothe:1992:IMT

[BR92a] Bob Boothe and Abhiram Ranade. Improved multithreading techniques for hiding communication latency in multiprocessors. *ACM SIGARCH Computer Architecture News*, 20(2):214–223, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burkhardt:1992:ICA

[BR92b] Walter H. Burkhardt and Stefan Rust. Integrated computer architecture development system. *ACM SIGARCH Computer Architecture News*, 20 (2):439, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1972:OFP

[Bra72] James C. Brakefield. An optimal floating point format. *ACM SIGARCH Computer Architecture News*, 1(4): 16–17, October 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bray:1977:DMR

[Bra77] Olin H. Bray. Data management requirements: The similarity of memory management, database systems, and message processing. *ACM SIGARCH Computer Architecture News*, 6(2):68–76, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1980:BAT

[Bra80a] James C. Brakefield. Is 32 bits of address too much? *ACM SIGARCH Computer Architecture News*, 8(6):39–40, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1980:PB

[Bra80b] James C. Brakefield. The peripheral bus. *ACM SIGARCH Computer Architecture News*, 8(6):41–43, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1982:JWO

[Bra82a] James Brakefield. Just what is an op-code?: or a universal computer design. *ACM SIGARCH Computer Architecture News*, 10(4):31–34, June 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1982:OSA

[Bra82b] James C. Brakefield. From the other side of the Atlantic: how to improve upon the MU5 design. *ACM SIGARCH Computer Architecture News*, 10 (4):11–16, June 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brakefield:1982:TI

[Bra82c] James C. Brakefield. Talk on interpreters. *ACM SIGARCH Computer Architecture News*, 10(6):21–28, December 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Biswas:2005:CAV

[BRC+05] Arijit Biswas, Paul Racunas, Razvan Cheveresan, Joel Emer, Shubhendu S. Mukherjee, and Ram Rangan. Computing architectural vulnerability factors for address-based structures. *ACM SIGARCH Computer Architecture News*, 33(2):532–543, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brewer:1972:RDD

[Bre72] J. E. Brewer. Recent doctoral dissertations of interest to SIGARCH. *ACM SIGARCH Computer Architecture News*, 1(4):18–20, October 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brewer:2010:TDR

[Bre10] Eric A. Brewer. Technology for developing regions:

Moore's Law is not enough. *ACM SIGARCH Computer Architecture News*, 38(1):1–2, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Black:1989:TLB

[BRGH89] D. L. Black, R. F. Rashid, D. B. Golub, and C. R. Hill. Translation lookaside buffer consistency: a software approach. *ACM SIGARCH Computer Architecture News*, 17(2):113–122, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bril:1987:IIA

[Bri87a] Reinder J. Bril. An implementation independent approach to cache memories. *ACM SIGARCH Computer Architecture News*, 15(3):17–24, June 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bril:1987:CLV

[Bri87b] Reinder J. Bril. On cacheability of lock-variables in tightly coupled multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 15 (3):25–32, June 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Blundell:2010:RTR

[BRM10] Colin Blundell, Arun Raghavan, and Milo M. K. Martin. RETCON: transactional repair without replay. *ACM SIGARCH Computer Architecture News*, 38(3):258–269, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Black:1999:BBT

[BRS99] Bryan Black, Bohuslav Rychlik, and John Paul Shen. The block-based trace cache. *ACM SIGARCH Computer Architecture News*, 27(2):196–207, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balakrishnan:2005:IPA

[BRUL05] Saisanthosh Balakrishnan, Ravi Rajwar, Mike Upton, and Konrad Lai. The impact of performance asymmetry in emerging multicore architectures. *ACM SIGARCH Computer Architecture News*, 33(2):506–517, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Barbacci:1973:AED

[BS73] Mario R. Barbacci and Daniel P. Siewiorek. Automated exploration of the design space for register transfer (RT) systems. *ACM SIGARCH Computer Architecture News*, 2(4):101–106, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bondi:1974:HHM

[BS74] James O. Bondi and Paul D. Stigall. HMO, a hardware microcode optimizer. *ACM SIGARCH Computer Architecture News*, 3(4):45–51, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bell:1976:CSW

[BS76] Gordon Bell and William D. Strecker. Computer structures: What have we learned from the PDP-11? *ACM SIGARCH Computer Architecture News*, 4(4):1–14, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhatia:1987:MIN

[BS87] Sanjiv K. Bhatia and A. G. Starling. Multilayered Illiac network scheme. *ACM SIGARCH Computer Architecture News*, 15(4):23–31, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bodin:1995:SAE

[BS95] François Bodin and André Seznec. Skewed associativity enhances performance predictability. *ACM SIGARCH Computer Architecture News*, 23(2):265–274, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bell:1998:RWW

[BS98a] Gorden Bell and W. D. Strecker. Retrospective: What have we learned from the PDP-11 — what we have learned from VAX and Alpha. In ACM [ACM98a], pages 6–10. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Bell:1998:CSW

[BS98b] Gordon Bell and William D. Strecker. Computer structures: what have we learned from the PDP-11? In ACM [ACM98a], pages 138–151. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Butts:2002:DDI

[BS02] J. Adam Butts and Guri Sohi. Dynamic dead-instruction detection and elimination. *ACM SIGARCH Computer Architecture News*, 30(5):199–210, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Butts:2004:UBR

[BS04] J. Adam Butts and Gurindar S. Sohi. Use-based register caching with decoupled indexing. *ACM SIGARCH Computer Architecture News*, 32 (2):302, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Balakrishnan:2006:PDD

[BS06] Saisanthosh Balakrishnan and Gurindar S. Sohi. Program demultiplexing: Data-flow based speculative parallelization of methods in sequential programs. *ACM SIGARCH Computer Architecture News*, 34 (2):302–313, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bengtsson:2008:DSA

[BS08] Jerker Bengtsson and Bertil Svensson. A domain-specific approach for software development on Manycore platforms. *ACM SIGARCH Computer Architecture News*, 36(5):2–10, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bairavasundaram:2004:XRN

[BSADAD04] Lakshmi N. Bairavasundaram, Muthian Sivathanu, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. X-RAY: a non-invasive exclusive caching mechanism for RAIDs. *ACM SIGARCH Computer Architecture News*, 32(2):176, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Biswas:1987:CCS

[BSD87] Nripendra N. Biswas, S. Srinivas, and Trishala Dharanendra. A centrally controlled shuffle network for reconfigurable and fault-tolerant architecture. *ACM SIGARCH Computer Architecture News*, 15(1):81–87, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bolosky:1991:NPT

[BSF+91] William J. Bolosky, Michael L. Scott, Robert P. Fitzgerald, Robert J. Fowler, and Alan L. Cox. NUMA policies and their relation to memory architecture. *ACM SIGARCH Computer Architecture News*, 19(2):212–221, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Beamer:2010:RAD

[BSK+10] Scott Beamer, Chen Sun, Yong-Jin Kwon, Ajay Joshi, Christopher Batten, Vladimir Stojanović, and Krste Asanović. Re-architecting DRAM memory systems with monolithically integrated silicon photonics. *ACM SIGARCH*

Computer Architecture News, 38(3):129–140, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ballapuram:2008:EAS

[BSL08] Chinnakrishnan S. Ballapuram, Ahmad Sharif, and Hsien-Hsin S. Lee. Exploiting access semantics and program behavior to reduce snoop power in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 36(1):60–69, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burcea:2008:PV

[BSMF08] Ioana Burcea, Stephen Somogyi, Andreas Moshovos, and Babak Falsafi. Predictor virtualization. *ACM SIGARCH Computer Architecture News*, 36(1):157–167, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Binkert:2006:INI

[BSR06] Nathan L. Binkert, Ali G. Saidi, and Steven K. Reinhardt. Integrated network interfaces for high-bandwidth TCP/IP. *ACM SIGARCH Computer Architecture News*, 34(5):315–324, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhargava:2008:ATD

[BSSM08] Ravi Bhargava, Benjamin Serebrin, Francesco Spadini, and Srilatha Manne. Accelerating two-dimensional page walks for virtualized systems. *ACM SIGARCH Computer Architecture News*, 36(1):26–35, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bush:1987:CSR

[BSUH87] William R. Bush, A. Dain Samples, David Ungar, and Paul N. Hilfinger. Compiling Smalltalk-80 to a RISC. *ACM SIGARCH Computer Architecture News*, 15(5):112–116, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baleanu:1989:ECC

[BT89] C. Baleanu and D. Tomescu. Embedding computers in a cellular array. *ACM SIGARCH Computer Architecture News*, 17(5):108–115, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bacha:2013:DRV

[BT13] Anys Bacha and Radu Teodorescu. Dynamic reduction of voltage margins by leveraging on-chip ECC in Itanium II processors. *ACM SIGARCH Computer Architecture News*, 41(3):297–307, June 2013. ICSA '13 conference proceedings.

Brodie:2006:SAH

[BTC06] Benjamin C. Brodie, David E. Taylor, and Ron K. Cytron. A scalable architecture for high-throughput regular-expression pattern matching. *ACM SIGARCH Computer Architecture News*, 34(2):191–202, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Brooks:2000:WFA

[BTM00] David Brooks, Vivek Tiwari, and Margaret Martonosi. Wattch: a framework for architectural-level power analysis and optimizations. *ACM SIGARCH Computer Architecture News*, 28(2):83–94, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baboescu:2005:TBR

[BTRS05] Florin Baboescu, Dean M. Tullsen, Grigore Rosu, and Sumeet Singh. A tree based router search engine architecture with single port memories. *ACM SIGARCH Computer Architecture News*, 33(2):123–133, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Biswas:2011:FFF

[BTS+11] Susmit Biswas, Mohit Tiwari, Timothy Sherwood, Luke Theogarajan, and Frederic T. Chong. Fighting fire with fire: modeling the datacenter-scale effects of targeted superlattice thermal management. *ACM SIGARCH Computer Architecture News*, 39 (3):331–340, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Bird:1977:APP

[BTW77] R. M. Bird, J. C. Tu, and R. M. Worthy. Associative/ parallel processors for searching very large textual data bases. *ACM SIGARCH Computer Architecture News*, 6(2): 8–9, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Buchholz:1978:RCS

[Buc78] W. Buchholz. Review of *Computer System Architecture* by M. Morris Mano, Prentice-Hall 1976. *ACM SIGARCH Computer Architecture News*, 7(1):24, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burkowski:1982:ISD

[Bur82] F. J. Burkowski. Instruction set design issues relating to a static dataflow computer. *ACM SIGARCH Computer Architecture News*, 10(3):101–111, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burkowski:1984:VAM

[Bur84] F. J. Burkowski. A vector and array multiprocessor extension of the sylvan architecture. *ACM SIGARCH Computer Architecture News*, 12 (3):4–11, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burtscher:2002:IIF

[Bur02] Martin Burtscher. An improved index function for (D)FCM predictors. *ACM SIGARCH Computer Architecture News*, 30(3):19–24, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Burtscher:2006:TTA

[Bur06] Martin Burtscher. TCgen 2.0: a tool to automatically generate lossless trace compressors. *ACM SIGARCH Computer Architecture News*, 34 (3):1–8, June 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Budiu:2004:SC

[BVCG04] Mihai Budiu, Girish Venkataramani, Tiberiu Chelcea, and Seth Copen Goldstein. Spatial computation. *ACM SIGARCH Computer Architecture News*, 32(5):14–26, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bermudo:2000:OCM

[BVGL00] Nerina Bermudo, Xavier Vera, Antonio González, and Josep Llosa. Optimizing cache miss equations polyhedra. *ACM SIGARCH Computer Architecture News*, 28(1):43–52, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bhoedjang:2000:EDA

[BVR+00] Raoul A. F. Bhoedjang, Kees Verstoep, Tim Rühl, Henri E. Bal, and Rutger F. H. Hofman. Evaluating design alternatives for reliable communication on high-speed networks. *ACM SIGARCH Computer Architecture News*, 28 (5):71–81, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baer:1988:IPM

[BW88] J.-L. Baer and W.-H. Wang. On the inclusion properties for multi-level cache hierarchies. *ACM SIGARCH Computer Architecture News*, 16 (2):73–80, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Baer:1998:IPM

[BW98a] Jean-Loup Baer and Wen-Hann Wang. On the inclusion properties for multi-level cache hierarchies. In ACM [ACM98a], pages 345–352. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Baer:1998:RIP

[BW98b] Jean-Loup Baer and Wen-Hann Wang. Retrospective: On the inclusion properties for multi-level cache hierarchies. In ACM [ACM98a], pages 59–60. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Bodin:1990:PEP

[BWJ+90] François Bodin, Daniel Windheiser, William Jalby, Daya Atapattu, Mannho Lee, and Dennis Gannon. Performance evaluation and prediction for parallel algorithms on the BBN GP1000. *ACM SIGARCH Computer Architecture News*, 18(3b):401–413, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Borin:2005:DBC

[BWWA05] Edson Borin, Cheng Wang, Youfeng Wu, and Guido Araujo. Dynamic binary control-flow errors detection. *ACM SIGARCH Computer Architecture News*, 33(5):15–20, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bekerman:2000:ELA

[BYG+00] Michael Bekerman, Adi Yoaz, Freddy Gabbay, Stephan Jourdan, Maxim Kalaev, and Ronny Ronen. Early load address resolution via register tracking. *ACM SIGARCH Computer Architecture News*, 28(2):306–315, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Butler:1991:SIS

[BYP+91] Michael Butler, Tse-Yu Yeh, Yale Patt, Mitch Alsup, Hunter Scales, and Michael Shebanow. Single instruction stream parallelism is greater than two. *ACM SIGARCH Computer Architecture News*, 19(3):276–286, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Bandyopadhyay:1987:CBM

[BZ87] Amitava Bandyopadhyay and Yuan F. Zheng. Combining both microcode and hardwired control in RISC. *ACM*

SIGARCH Computer Architecture News, 15(4):11–15, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Culler:1988:RRD

[CA88] D. E. Culler and Arvind. Resource requirements of dataflow programs. *ACM SIGARCH Computer Architecture News*, 16(2):141–150, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chaiken:1994:SEC

[CA94] D. Chaiken and A. Agarwal. Software-extended coherent shared memory: performance and cost. *ACM SIGARCH Computer Architecture News*, 22(2):314–324, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2009:SPP

[CAD09] Jianwei Chen, Murali Annavaram, and Michel Dubois. SlackSim: a platform for parallel simulations of CMPs on CMPs. *ACM SIGARCH Computer Architecture News*, 37 (2):20–29, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Callan:1974:APS

[Cal74] James F. Callan. The architecture of the Picture System. *ACM SIGARCH Computer Architecture News*, 3(4):13–16, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Carlile:1996:IB

[Car96] Brad Carlile. Interpreting benchmarks. *ACM SIGARCH Computer Architecture News*, 24(4):20–21, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Colohan:2006:TDB

[CASM06] Christopher B. Colohan, Anastassia Ailamaki, J. Gregory Steffan, and Todd C. Mowry. Tolerating dependences between large speculative threads via sub-threads. *ACM SIGARCH Computer Architecture News*, 34(2):216–226, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1994:PSS

[CB94a] T.-F. Chen and J.-L. Baer. A performance study of software and hardware data prefetching schemes. *ACM SIGARCH Computer Architecture News*, 22(2):223–232, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cvetanovic:1994:CAA

[CB94b] Z. Cvetanovic and D. Bhandarkar. Characterization of Alpha AXP performance using TP and SPEC workloads.

ACM SIGARCH Computer Architecture News, 22(2):60–70, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Curtsinger:2013:SSS

[CB13] Charlie Curtsinger and Emery D. Berger. STABILIZER: statistically sound performance evaluation. *ACM SIGARCH Computer Architecture News*, 41(1):219–228, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cox:2017:EAT

[CB17] Guilherme Cox and Abhishek Bhattacharjee. Efficient address translation for architectures with multiple page sizes. *ACM SIGARCH Computer Architecture News*, 45 (1):435–448, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Clark:2005:AFT

[CBC+05] Nathan Clark, Jason Blome, Michael Chu, Scott Mahlke, Stuart Biles, and Krisztian Flautner. An architecture framework for transparent instruction set customization in embedded processors. *ACM SIGARCH Computer Architecture News*, 33(2):272–283, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cox:2008:XEO

[CBC+08] Russ Cox, Tom Bergan, Austin T. Clements, Frans Kaashoek, and Eddie Kohler. Xoc, an extension-oriented compiler for systems programming. *ACM SIGARCH Computer Architecture News*, 36(1):244–254, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Corbett:1993:OVP

[CBF93] Peter F. Corbett, Sandra Johnson Baylor, and Dror G. Feitelson. Overview of the Vesta parallel file system. *ACM SIGARCH Computer Architecture News*, 21(5):7–14, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cao:2012:YYP

[CBGM12] Ting Cao, Stephen M. Blackburn, Tiejun Gao, and Kathryn S. McKinley. The yin and yang of power and performance for asymmetric hardware and managed software. *ACM SIGARCH Computer Architecture News*, 40 (3):225–236, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Chen:1992:SBS

[CBJ92] J. Bradley Chen, Anita Borg, and Norman P. Jouppi. A simulation based study of TLB performance. *ACM SIGARCH Computer Architecture News*, 20(2):114–123, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Clark:1988:MVP

[CBK88] D. W. Clark, P. J. Bannon, and J. B. Keller. Measuring VAX 8800 performance with a histogram hardware monitor. *ACM SIGARCH Computer Architecture News*, 16(2):176–185, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Campanoni:2014:HRA

[CBK+14] Simone Campanoni, Kevin Brownell, Svilen Kanev, Timothy M. Jones, Gu-Yeon Wei, and David Brooks. HELIX–RC: an architecture-compiler co-design for automatic parallelization of irregular programs. *ACM SIGARCH Computer Architecture News*, 42 (3):217–228, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cooper-Balis:2012:BBM

[CBRJ12] Elliott Cooper-Balis, Paul Rosenfeld, and Bruce Jacob. Buffer-on-board memory systems. *ACM SIGARCH Computer Architecture News*, 40 (3):392–403, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Cheriton:1988:CCM

[CBS88] David R. Cheriton, Pat Boyle, and Gert A. Slavenburg. Comments on "Coherency for multiprocessor virtual addresses caches" by James R. Goodman. *ACM SIGARCH Computer Architecture News*, 16 (3):3–6, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cox:1998:MLT

[CBS98] Michael Cox, Narendra Bhandari, and Michael Shantz. Multi-level texture caching for 3D graphics hardware. *ACM SIGARCH Computer Architecture News*, 26(3):86–97, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chiueh:1991:MTV

[cC91] Tzi cker Chiueh. Multi-threaded vectorization. *ACM SIGARCH Computer Architecture News*, 19(3):352–361, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Crandall:2005:SAM

[CC05] Jedidiah R. Crandall and Frederic T. Chong. A security assessment of the Minos architecture. *ACM SIGARCH Computer Architecture News*, 33(1):48–57, March 2005. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Coburn:2011:NHM

[CCA+11] Joel Coburn, Adrian M. Caulfield, Ameen Akel, Laura M. Grupp, Rajesh K. Gupta, Ranjit Jhala, and Steven Swanson. NV-Heaps: making persistent objects fast and safe with next-generation, non-volatile memories. *ACM SIGARCH Computer Architecture News*, 39(1):105–118, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Coons:2006:SPS

[CCB+06] Katherine E. Coons, Xia Chen, Doug Burger, Kathryn S. McKinley, and Sundeep K. Kushwaha. A spatial path scheduling algorithm for EDGE architectures. *ACM SIGARCH Computer Architecture News*, 34(5):129–140, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Castan:1988:MPG

[CCC+88] M. Castan, A. Contessa, E. Cousin, C. Coustet, and B. Lecussan. MaRs: a parallel graph reduction multiprocessor. *ACM SIGARCH Computer Architecture News*, 16 (3):17–24, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chaudhry:2009:SST

[CCE+09] Shailender Chaudhry, Robert Cypher, Magnus Ekman, Martin Karlsson, Anders Landin, Sherman Yip, Håkan Zeffer, and Marc Tremblay. Simultaneous speculative threading: a novel pipeline architecture implemented in Sun's Rock processor. *ACM SIGARCH Computer Architecture News*, 37(3):484–495, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chou:2000:UML

[CCEH00] Andy Chou, Benjamin Chelf, Dawson Engler, and Mark Heinrich. Using meta-level compilation to check FLASH protocol code. *ACM SIGARCH Computer Architecture News*, 28(5):59–70, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chow:1987:HMA

[CCH+87] F. Chow, S. Correll, M. Himelstein, E. Killian, and L. Weber. How many addressing modes are enough? *ACM SIGARCH Computer Architecture News*, 15(5):117–121, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Castro:2008:BBR

[CCM08] Miguel Castro, Manuel Costa, and Jean-Philippe Martin.

Better bug reporting with better privacy. *ACM SIGARCH Computer Architecture News*, 36(1):319–328, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:1987:CDS

[CCS87] J. H. Chang, H. Chao, and K. So. Cache design of a sub-micron CMOS System/370. *ACM SIGARCH Computer Architecture News*, 15 (2):208–213, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Carretero:2009:EER

[CCV+09] Javier Carretero, Pedro Chaparro, Xavier Vera, Jaume Abella, and Antonio González. End-to-end register data-flow continuous self-test. *ACM SIGARCH Computer Architecture News*, 37(3):105–115, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Conner:1977:IOC

[CD77] William M. Conner and Edward R. Dirling. Input/output considerations in look-ahead processing. *ACM SIGARCH Computer Architecture News*, 6(1):7–12, June 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cook:1982:EIO

[CD82] Robert P. Cook and Nitin Donde. An experiment to improve operand addressing. *ACM SIGARCH Computer Architecture News*, 10(2):87–91, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Criswell:2014:VGP

[CDA14] John Criswell, Nathan Dautenhahn, and Vikram Adve. Virtual Ghost: protecting applications from hostile operating systems. *ACM SIGARCH Computer Architecture News*, 42(1):81–96, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chisnall:2017:CJS

[CDG+17] David Chisnall, Brooks Davis, Khilan Gudka, David Brazdil, Alexandre Joannou, Jonathan Woodruff, A. Theodore Markettos, J. Edward Maste, Robert Norton, Stacey Son, Michael Roe, Simon W. Moore, Peter G. Neumann, Ben Laurie, and Robert N. M. Watson. CHERI JNI: Sinking the Java security model into the C. *ACM SIGARCH Computer Architecture News*, 45 (1):569–583, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cox:1994:SVH

[CDK+94] A. L. Cox, S. Dwarkadas, P. Keleher, H. Lu, R. Rajamony, and W. Zwaenepoel. Software versus hardware shared-memory implementation: a case study. *ACM SIGARCH Computer Architecture News*, 22(2):106–117, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chung:2013:LBD

[CDL13] Eric S. Chung, John D. Davis, and Jaewon Lee. LINQits: big data on little clients. *ACM SIGARCH Computer Architecture News*, 41(3):261–272, June 2013. ICSA '13 conference proceedings.

Caluwaerts:1982:DFA

[CDP82] L. J. Caluwaerts, J. Debacker, and J. A. Peperstraete. A data flow architecture with a paged memory system. *ACM SIGARCH Computer Architecture News*, 10(3):120–127, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Caluwaerts:1983:ISD

[CDP83] L. J. Caluwaerts, J. Debacker, and J. A. Peperstraete. Implementing streams on a data flow computer system with paged memory. *ACM SIGARCH Computer Architecture News*, 11(3):76–83, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2014:DSF

[CDS+14] Tianshi Chen, Zidong Du, Ninghui Sun, Jia Wang, Chengyong Wu, Yunji Chen, and Olivier Temam. DianNao: a small-footprint high-throughput accelerator for ubiquitous machine-learning. *ACM SIGARCH Computer Architecture News*, 42(1):269–284, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cherupalli:2017:BPA

[CDY+17a] Hari Cherupalli, Henry Duwe, Weidong Ye, Rakesh Kumar, and John Sartori. Bespoke processors for applications with ultra-low area and power constraints. *ACM SIGARCH Computer Architecture News*, 45(2):41–54, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cherupalli:2017:DAS

[CDY+17b] Hari Cherupalli, Henry Duwe, Weidong Ye, Rakesh Kumar, and John Sartori. Determining application-specific peak power and energy requirements for ultra-low power processors. *ACM SIGARCH Computer Architecture News*, 45(1):3–16, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chrysos:1998:MDP

[CE98] George Z. Chrysos and Joel S. Emer. Memory dependence prediction using store sets.

ACM SIGARCH Computer Architecture News, 26(3):142–153, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2016:ESA

[CES16] Yu-Hsin Chen, Joel Emer, and Vivienne Sze. Eyeriss: a spatial architecture for energy-efficient dataflow for convolutional neural networks. *ACM SIGARCH Computer Architecture News*, 44 (3):367–379, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chu:1982:VAH

[CF82] King-Hang Chu and King-Sun Fu. VLSI architectures for high speed recognition of context-free languages and finite-state languages. *ACM SIGARCH Computer Architecture News*, 10(3):43–49, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cox:1993:ACC

[CF93] Alan L. Cox and Robert J. Fowler. Adaptive cache coherency for detecting migratory shared data. *ACM SIGARCH Computer Architecture News*, 21(2):98–108, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chou:2004:MOE

[CFA04] Yuan Chou, Brian Fahs, and Santosh Abraham. Microarchitecture optimizations for exploiting memory-level parallelism. *ACM SIGARCH Computer Architecture News*, 32 (2):76, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2012:IOD

[CFE+12] Yang Chen, Shuangde Fang, Lieven Eeckhout, Olivier Temam, and Chengyong Wu. Iterative optimization for the data center. *ACM SIGARCH Computer Architecture News*, 40(1):49–60, March 2012. ASPLOS '12 conference proceedings.

Chang:2013:IVP

[CFG+13] Xiaotao Chang, Hubertus Franke, Yi Ge, Tao Liu, Kun Wang, Jimi Xenidis, Fei Chen, and Yu Zhang. Improving virtualization in the presence of software managed translation lookaside buffers. *ACM SIGARCH Computer Architecture News*, 41(3):120–129, June 2013. ICSA '13 conference proceedings.

Casse:1999:UAI

[CFRS99] H. Cassé, L. Féraud, C. Rochange, and P. Sainrat. Using the abstract interpretation technique for static pointer analysis. *ACM SIGARCH Computer Architecture News*, 27(1):47–50, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheriton:2012:HAS

[CFS+12] David Cheriton, Amin Firoozshahian, Alex Solomatnikov, John P. Stevenson, and Omid Azizi. HICAMP: architectural support for efficient concurrency-safe shared structured data access. *ACM SIGARCH Computer Architecture News*, 40 (1):287–300, March 2012. ASPLOS '12 conference proceedings.

Cate:1991:CCC

[CG91] Vincent Cate and Thomas Gross. Combining the concepts of compression and caching for a two-level filesystem. *ACM SIGARCH Computer Architecture News*, 19 (2):200–211, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheng:1992:TCB

[CG92] Der-Chung Cheng and Kanad Ghose. The time-constrained barrier synchronizer and its applications in parallel systems (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):428, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Calder:1994:FAI

[CG94] B. Calder and D. Grunwald. Fast and accurate instruction fetch and branch prediction. *ACM SIGARCH Computer Architecture News*, 22 (2):2–11, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Calder:1995:NCL

[CG95a] Brad Calder and Dirk Grunwald. Next cache line and set prediction. *ACM SIGARCH Computer Architecture News*, 23(2):287–296, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Callahan:1995:NLO

[CG95b] Timothy Callahan and Seth Copen Goldstein. NIFDY: a low overhead, high throughput network interface. *ACM SIGARCH Computer Architecture News*, 23(2):230–241, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chilimbi:2006:HIH

[CG06] Trishul M. Chilimbi and Vinod Ganapathy. HeapMD: identifying heap-based bugs using anomaly detection. *ACM SIGARCH Computer Architecture News*, 34(5):219–228, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheriton:1989:MLS

[CGB89] D. R. Cheriton, H. A. Goosen, and P. D. Boyle. Multilevel shared caching techniques for scalability in VMP-M/C. *ACM SIGARCH Computer Architecture News*, 17 (3):16–24, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheriton:1988:VMI

[CGBG88] D. R. Cheriton, A. Gupta, P. D. Boyle, and H. A. Goosen. The VMP multiprocessor: initial experience, refinements, and performance evaluation. *ACM SIGARCH Computer Architecture News*, 16(2):410–421, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cohn:1989:ACT

[CGL89] Robert Cohn, Thomas Gross, and Monica Lam. Architecture and compiler tradeoffs for a long instruction word processor. *ACM SIGARCH Computer Architecture News*, 17 (2):2–14, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Culler:1992:AMM

[CGL92] David E. Culler, Michial Gunter, and James C. Lee. Analysis of multithreaded microprocessors under multiprogramming. *ACM SIGARCH Computer Architecture News*, 20(2):438, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2008:OVB

[CGL+08] Xiaoxin Chen, Tal Garfinkel, E. Christopher Lewis, Pratap Subrahmanyam, Carl A. Waldspurger, Dan Boneh, Jeffrey Dwoskin, and Dan R. K. Ports. Overshadow: a virtualization-based approach to retrofitting protection in commodity operating systems. *ACM SIGARCH Computer Architecture News*, 36(1):2–13, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Caulfield:2009:GUF

[CGS09] Adrian M. Caulfield, Laura M. Grupp, and Steven Swanson. Gordon: using flash memory to build fast, power-efficient clusters for data-intensive applications. *ACM SIGARCH Computer Architecture News*, 37(1):217–228, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chen:2014:ARA

[CGT+14] Tianshi Chen, Qi Guo, Ke Tang, Olivier Temam, Zhiwei Xu, Zhi-Hua Zhou, and Yunji Chen. ArchRanker: a ranking approach to design space exploration. *ACM SIGARCH Computer Architecture News*, 42(3):85–96, June 2014. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Cruz:2000:MBR

[CGVT00] José-Lorenzo Cruz, Antonio González, Mateo Valero, and Nigel P. Topham. Multiple-banked register file architectures. *ACM SIGARCH Computer Architecture News*, 28(2):316–325, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chin:1984:CPM

[CH84] Chi-Yuan Chin and Kai Hwang. Connection principles for multipath, packet switching networks. *ACM SIGARCH Computer Architecture News*, 12(3):99–108, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chuang:1985:VSA

[CH85] Henry Y. H. Chuang and Guo He. A versatile systolic array for matrix computations. *ACM SIGARCH Computer Architecture News*, 13(3):315–322, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chow:1987:ATD

[CH87] P. Chow and M. Horowitz. Architectural tradeoffs in the design of MIPS-X. *ACM SIGARCH Computer Architecture News*, 15(2):300–308, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cantin:2001:CPS

[CH01] Jason F. Cantin and Mark D. Hill. Cache performance for selected SPEC CPU2000 benchmarks. *ACM SIGARCH Computer Architecture News*, 29(4):13–18, September 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chaudhuri:2004:SAN

[CH04] Mainak Chaudhuri and Mark Heinrich. SMTp: An Architecture for Next-generation Scalable Multi-threading. *ACM SIGARCH Computer Architecture News*, 32(2):124, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:1978:BRD

[Cha78a] Hsu Chang. Bubbles for relational database. *ACM SIGARCH Computer Architecture News*, 7(2):110–116, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chattergy:1978:CL

[Cha78b] Rahul Chattergy. In the current literature. *ACM SIGARCH Computer Architecture News*, 7(4):30, December 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chan:1990:HAA

[Cha90] Tony F. Chan. Hierarchical algorithms and architectures for parallel scientific computing. *ACM SIGARCH Computer Architecture News*, 18(3b):318–329, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chalterjee:1992:BRI

[Cha92] Siddhartha Chalterjee. Book review: *The Impact of Vector and Parallel Architectures on the Gaussian Elimination Algorithm* by Yves Robert (Manchester University Press and Halsted Press, 1991). *ACM SIGARCH Computer Architecture News*, 20(3):63–64, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chase:1996:RW

[Cha96] David Chase. Register windows. *ACM SIGARCH Computer Architecture News*, 24(4):21, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Connors:2000:HSD

[CHCmWH00] Daniel A. Connors, Hillery C. Hunter, Ben-Chung Cheng, and Wen mei W. Hwu. Hardware support for dynamic activation of compiler-directed computation reuse. *ACM SIGARCH Computer Architecture News*, 28(5):222–233, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2010:LPP

[CHCW10] Yunji Chen, Weiwu Hu, Tianshi Chen, and Ruiyang Wu. LReplay: a pending period based deterministic replay scheme. *ACM SIGARCH Computer Architecture News*, 38(3):187–197, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cherniavsky:1981:CMA

[Che81] Vladimir S. Cherniavsky. The computing memory another distributed computer architecture. *ACM SIGARCH Computer Architecture News*, 9(4): 22–24, June 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1984:ECC

[Che84a] C. L. Chen. Error-correcting codes for semiconductor memories. *ACM SIGARCH Computer Architecture News*, 12(3):245–247, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chesley:1984:WM

[Che84b] Gilman D. Chesley. A wafer microcomputer. *ACM SIGARCH Computer Architecture News*, 12(4):4–6, September 1984. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chesley:1987:AWN

[Che87] Gilman Chesley. Addressable WSI: a non-redundant approach. *ACM SIGARCH Computer Architecture News*, 15(1):73–80, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1990:SBV

[Che90] Philip C. Chen. Supercomputer-based visualization systems used for analyzing output data of a numerical weather prediction model. *ACM SIGARCH Computer Architecture News*, 18(3b):296–309, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chevance:1992:EMM

[Che92] R. J. Chevance. An evaluation methodology for microprocessor and system architecture. *ACM SIGARCH Computer Architecture News*, 20 (3):4–13, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chess:2005:SAC

[Che05] David M. Chess. Security in autonomic computing. *ACM SIGARCH Computer Architecture News*, 33 (1):2–5, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2017:BDA

[Che17] Yunji Chen. Big data analytics and intelligence at alibaba cloud. *ACM SIGARCH Computer Architecture News*, 45(1):1, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Citron:2006:HGM

[CHG06] Daniel Citron, Adham Hurani, and Alaa Gnadrey. The harmonic or geometric mean: does it really matter? *ACM SIGARCH Computer Architecture News*, 34(4):18–25, September 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chiu:1989:RLF

[Chi89] P. K. Chiu. Representation of logic functions by `if--then` clauses. *ACM SIGARCH Computer Architecture News*, 17(5):103–107, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Colwell:1983:PTR

[CHJ83] Robert P. Colwell, Charles Y. Hitchcock, and E. Douglas Jensen. Peering through the RISC/CISC fog: an outline of research. *ACM SIGARCH Computer Architecture News*, 11(1):44–50, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Carpenter:2012:EET

[CHK+12] Aaron Carpenter, Jianyun Hu, Ovunc Kocabas, Michael Huang, and Hui Wu. Enhancing effective throughput for transmission line-based bus. *ACM SIGARCH Computer Architecture News*, 40 (3):165–176, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Cypher:1993:ARP

[CHKM93] R. Cypher, A. Ho, S. Konstantinidou, and P. Messina. Architectural requirements of parallel scientific applications with explicit communication. *ACM SIGARCH Computer Architecture News*, 21(2):2–13, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Colin:2016:EIF

[CHLS16] Alexei Colin, Graham Harvey, Brandon Lucia, and Alanson P. Sample. An energy-interference-free hardware-software debugger for intermittent energy-harvesting systems. *ACM SIGARCH Computer Architecture News*, 44 (2):577–589, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Clark:2008:VVE

[CHM08] Nathan Clark, Amir Hormati, and Scott Mahlke. VEAL: Virtualized execution accelerator for loops. *ACM SIGARCH Computer Architecture News*, 36(3):389–400, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:1997:TPI

[CHP97] Po-Yung Chang, Eric Hao, and Yale N. Patt. Target prediction for indirect jumps. *ACM SIGARCH Computer Architecture News*, 25(2):274–283, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chroust:1976:DIV

[Chr76] G. Chroust. Data interfaces versus control interfaces: a half-baked conjecture. *ACM SIGARCH Computer Architecture News*, 5(4): 39–40, October 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chroust:1977:BRR

[Chr77] G. Chroust. Book reviews: Review of *Digital System Implementation* by Gerrit A. Blaauw, Prentice Hall, Series in Automatic Computation 1976. *ACM SIGARCH Computer Architecture News*, 6(4): 27–28, October 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Christara:1990:SCP

[Chr90] Christina C. Christara. Schur complement preconditioned conjugate gradient methods for spline collocation equations. *ACM SIGARCH Computer Architecture News*, 18(3b):108–120, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chu:1977:AHD

[Chu77a] Yaohan Chu. Architecture of a hardware data interpreter. *ACM SIGARCH Computer Architecture News*, 5(7): 1–9, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chu:1977:DEC

[Chu77b] Yaohan Chu. Direct-execution computer architecture. *ACM SIGARCH Computer Architecture News*, 6(5):18–23, December 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cher:2004:SPM

[CHV04] Chen-Yong Cher, Antony L. Hosking, and T. N. Vijaykumar. Software prefetching for mark-sweep garbage collection: hardware analysis and software redesign. *ACM SIGARCH Computer Architecture News*, 32(5):199–210, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cui:2013:VSR

[CHWY13] Heming Cui, Gang Hu, Jingyue Wu, and Junfeng Yang. Verifying systems rules using rule-directed symbolic execution. *ACM SIGARCH Computer Architecture News*, 41(1):329–342, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Carpenter:2011:CGS

[CHX+11] Aaron Carpenter, Jianyun Hu, Jie Xu, Michael Huang, and Hui Wu. A case for globally shared-medium on-chip interconnect. *ACM SIGARCH Computer Architecture News*, 39(3):271–282, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chen:2014:ICB

[CHZ+14] Shaoming Chen, Yue Hu, Ying Zhang, Lu Peng, Jesse Ardonne, Samuel Irving, and Ashok Srivastava. Increasing off-chip bandwidth in multi-core processors with switchable pins. *ACM SIGARCH Computer Architecture News*, 42(3):385–396, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Citron:2003:MPM

[Cit03] Daniel Citron. MisSPECulation: partial and misleading use of SPEC CPU2000 in computer architecture conferences. *ACM SIGARCH Computer Architecture News*, 31 (2):52–61, May 2003. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cortadella:1988:DRC

[CJ88] Jordi Cortadella and Teodor Jové. Dynamic RAM for on-chip instruction caches. *ACM SIGARCH Computer Architecture News*, 16(4):45–50, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cuppu:2001:CLS

[CJ01] Vinodh Cuppu and Bruce Jacob. Concurrency, latency, or system overhead: which has the largest impact on uniprocessor DRAM-system performance? *ACM SIGARCH Computer Architecture News*, 29(2):62–71, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ju:1999:PMD

[cJCO99] Roy Dz ching Ju, Jean-François Collard, and Karim Oukbir. Probabilistic memory disambiguation and its application to data speculation. *ACM SIGARCH Computer Architecture News*, 27(1):27–30, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cuppu:1999:PCC

[CJDM99] Vinodh Cuppu, Bruce Jacob, Brian Davis, and Trevor Mudge. A performance comparison of contemporary DRAM architectures. *ACM SIGARCH Computer Architecture News*, 27(2):222–233, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cooksey:2002:SCD

[CJG02] Robert Cooksey, Stephan Jourdan, and Dirk Grunwald. A stateless, content-directed data prefetching mechanism. *ACM SIGARCH Computer Architecture News*, 30(5):279–290, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2005:HMP

[CJK+05] Julia Chen, Philo Juang, Kevin Ko, Gilberto Contreras, David Penry, Ram Rangan, Adam Stoler, Li-Shiuan Peh, and Margaret Martonosi. Hardware-modulated parallelism in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 33(4):54–63, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cerretti:1977:UIP

[CJM77] R. Cerretti, D. Jasilli, and D. R. Matteucci. Ulisse: An Italian project for a multifunctional terminal system. *ACM SIGARCH Computer Architecture News*, 6(2):48–50, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheng:1999:DHP

[CJZ99] Peng Cheng, Hai Jin, and Jiangling Zhang. Design of high performance RAID in real-time system. *ACM SIGARCH Computer Architecture News*, 27(3):10–17, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chien:1992:PAR

[CK92] Andrew A. Chien and Jae H. Kim. Planar-adaptive routing: low-cost adaptive networks for multiprocessors. *ACM SIGARCH Computer Architecture News*, 20(2):268–277, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cvetanovic:2000:PAA

[CK00] Zarka Cvetanovic and R. E. Kessler. Performance analysis of the Alpha 21264-based Compaq ES40 system. *ACM SIGARCH Computer Architecture News*, 28(2):192–202, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chaiken:1991:LDS

[CKA91] David Chaiken, John Kubiatowicz, and Anant Agarwal. LimitLESS directories: a scalable cache coherence scheme. *ACM SIGARCH Computer Architecture News*, 19(2):224–234, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cianchetti:2009:PRT

[CKA09] Mark J. Cianchetti, Joseph C. Kerekes, and David H. Albonesi. Phastlane: a rapid transit optical routing network. *ACM SIGARCH Computer Architecture News*, 37(3):441–450, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chipounov:2011:SPV

[CKC11] Vitaly Chipounov, Volodymyr Kuznetsov, and George Candea. S2E: a platform for in-vivo multi-path analysis of software systems. *ACM SIGARCH Computer Architecture News*, 39(1):265–278, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cmelik:1991:AMS

[CKDK91] Robert F. Cmelik, Shing I. Kong, David R. Ditzel, and Edmund J. Kelly. An analysis of MIPS and SPARC instruction set utilization on the SPEC benchmarks. *ACM SIGARCH Computer Architecture News*, 19(2):290–302, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:2016:DLD

[CKmWH16] Li-Wen Chang, Hee-Seok Kim, and Wen mei W. Hwu. DySel: Lightweight dynamic selection for kernel-based data-parallel programming model. *ACM SIGARCH Computer Architecture News*, 44 (2):667–680, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Callahan:1991:SP

[CKP91] David Callahan, Ken Kennedy, and Allan Porterfield. Software prefetching. *ACM SIGARCH Computer Architecture News*, 19(2):40–52, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cybenko:1990:SPE

[CKPK90] George Cybenko, Lyle Kipp, Lynn Pointer, and David Kuck. Supercomputer performance evaluation and the Perfect Benchmarks. *ACM SIGARCH Computer Architecture News*, 18(3b):254–266, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2008:FHA

[CKS+08] Shimin Chen, Michael Kozuch, Theodoros Strigkos, Babak Falsafi, Phillip B. Gibbons, Todd C. Mowry, Vijaya Ramachandran, Olatunji Ruwase, Michael Ryan, and Evangelos Vlachos. Flexible hardware acceleration for instruction-grain program monitoring. *ACM SIGARCH Computer Architecture News*, 36(3):377–388, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cherupalli:2016:EDT

[CKS16] Hari Cherupalli, Rakesh Kumar, and John Sartori. Exploiting dynamic timing slack for energy efficiency in ultra-low-power embedded systems. *ACM SIGARCH Computer Architecture News*, 44(3): 671–681, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Clements:2012:SAS

[CKZ12] Austin T. Clements, M. Frans Kaashoek, and Nickolai Zeldovich. Scalable address spaces using RCU balanced trees. *ACM SIGARCH Computer Architecture News*, 40 (1):199–210, March 2012. ASPLOS '12 conference proceedings.

Clark:1982:MAI

[CL82] Douglas W. Clark and Henry M. Levy. Measurement and analysis of instruction use in the VAX-11/780. *ACM SIGARCH Computer Architecture News*, 10(3):9–17, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cargill:1987:CHS

[CL87] T. A. Cargill and B. N. Locanthi. Cheap hardware support for software debugging and profiling. *ACM SIGARCH Computer Architecture News*, 15(5):82–83, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1989:AVA

[CL89] C.-L. Chen and C.-K. Liao. Analysis of vector access performance on skewed interleaved memory. *ACM SIGARCH Computer Architecture News*, 17(3):387–394, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chaudhry:1994:CMP

[CL94] Ghulam Chaudhry and Xuechang Li. A case for the multithreaded processor architecture. *ACM SIGARCH Computer Architecture News*, 22 (4):55–59, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cain:2004:MOV

[CL04] Harold W. Cain and Mikko H. Lipasti. Memory ordering: a value-based approach. *ACM SIGARCH Computer Architecture News*, 32(2):90, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cameron:2009:ASS

[CL09] Robert D. Cameron and Dan Lin. Architectural support for SWAR text processing with parallel bit streams: the inductive doubling principle. *ACM SIGARCH Computer Architecture News*, 37(1):337–348, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Clark:1987:PPV

[Cla87] Douglas W. Clark. Pipelining and performance in the VAX 8800 processor. *ACM SIGARCH Computer Architecture News*, 15(5):173–177, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chung:1990:COP

[CLC90] Kuo-Liang Chung, Ferng-Ching Lin, and Wen-Chin Chen. Cost-optimal parallel B-spline interpolations. *ACM SIGARCH Computer Architecture News*, 18(3b):121–131, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chau:2012:RRP

[CLC12] Thomas C. P. Chau, Wayne Luk, and Peter Y. K. Cheung. Roberts: reconfigurable platform for benchmarking real-time systems. *ACM SIGARCH Computer Architecture News*, 40(5):10–15, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Chen:2017:PGF

[CLF+17] Yajing Chen, Shengshuo Lu, Cheng Fu, David Blaauw, Ronald Dreslinski, Jr., Trevor Mudge, and Hun-Seok Kim. A programmable Galois field processor for the Internet of Things. *ACM SIGARCH Computer Architecture News*, 45(2):55–68, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Czechowski:2014:IEE

[CLG+14] Kenneth Czechowski, Victor W. Lee, Ed Grochowski, Ronny Ronen, Ronak Singhal, Richard Vuduc, and Pradeep Dubey. Improving the energy efficiency of big cores. *ACM SIGARCH Computer Architecture News*, 42 (3):493–504, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cain:2001:DBT

[CLL01] Harold W. Cain, Kevin M. Lepak, and Mikko H. Lipasti. A dynamic binary translation approach to architectural simulation. *ACM SIGARCH Computer Architecture News*, 29(1):27–36, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chi:2007:TQA

[CLM07] Eric Chi, Stephen A. Lyon, and Margaret Martonosi. Tailoring quantum architectures to implementation style: a quantum computer for mobile and persistent qubits. *ACM SIGARCH Computer Architecture News*, 35(2):198–209, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Corliss:2003:DPM

[CLR03] Marc L. Corliss, E. Christopher Lewis, and Amir Roth. DISE: a programmable macro engine for customizing applications. *ACM SIGARCH Computer Architecture News*, 31(2):362–373, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Corliss:2005:UDP

[CLR05] Marc L. Corliss, E. Christopher Lewis, and Amir Roth. Using DISE to protect return addresses from attack. *ACM SIGARCH Computer Architecture News*, 33(1):65–72, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Copeland:1973:ACC

[CLS73] George P. Copeland, Jr., G. J. Lipovski, and Stanley Y. W. Su. The architecture of CASSM: a cellular system for non-numeric processing. *ACM SIGARCH Computer Architecture News*, 2(4):121–128, December 1973. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cantin:2005:IMP

[CLS05] Jason F. Cantin, Mikko H. Lipasti, and James E. Smith. Improving multiprocessor performance with coarse-grain coherence tracking. *ACM SIGARCH Computer Architecture News*, 33(2):246–257, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cantin:2006:SP

[CLS06] Jason F. Cantin, Mikko H. Lipasti, and James E. Smith. Stealth prefetching. *ACM SIGARCH Computer Architecture News*, 34(5):274–282, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cao:1993:TPR

[CLVW93] Pei Cao, Swee Boon Lim, Shivakumar Venkataraman, and John Wilkes. The TickerTAIP parallel RAID architecture. *ACM SIGARCH Computer Architecture News*, 21 (2):52–63, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chi:2016:PNP

[CLX+16] Ping Chi, Shuangchen Li, Cong Xu, Tao Zhang, Jishen Zhao, Yongpan Liu, Yu Wang, and Yuan Xie. PRIME: a novel processing-in-memory architecture for neural network computation in ReRAM-based main memory. *ACM SIGARCH Computer Architecture News*, 44(3):27–39, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chroust:1980:RMO

[CM80] G. Chroust and J. R. Mühlbacher. Rivalling multiprocessor organization: a hardware/speed trade-off. *ACM SIGARCH Computer Architecture News*, 8(5):7–10, August 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chiang:1987:DEL

[CM87] Y. P. Chiang and M. L. Manwaring. Direct execution Lisp and cell memory. *ACM SIGARCH Computer Architecture News*, 15(4):52–57, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Clauss:2000:AML

[CM00] Philippe Clauss and Benoît Meister. Automatic memory layout transformations to optimize spatial locality in parameterized loop nests. *ACM SIGARCH Computer Architecture News*, 28(1):11–19, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cook:2013:HEC

[CMB+13] Henry Cook, Miquel Moreto, Sarah Bird, Khanh Dao, David A. Patterson, and Krste Asanovic. A hardware evaluation of cache partitioning to improve utilization and energy-efficiency while preserving responsiveness. *ACM SIGARCH Computer Architecture News*, 41(3):308–319, June 2013. ICSA '13 conference proceedings.

Chang:1991:IAF

[CMC+91] Pohua P. Chang, Scott A. Mahlke, William Y. Chen, Nancy J. Warter, and Wen mei W. Hwu. IMPACT: an architectural framework for multiple-instruction-issue processors. *ACM SIGARCH Computer Architecture News*, 19(3):266–275, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:1998:IAF

[CMC+98] Pohua P. Chang, Scott A. Mahlke, William Y. Chen, Nancy J. Warter, and Wen mei W. Hwu. IMPACT: an architectural framework for multiple-instruction-issue processors. In ACM [ACM98a], pages 408–417. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Caulfield:2012:PSU

[CME+12] Adrian M. Caulfield, Todor I. Mollov, Louis Alex Eisner, Arup De, Joel Coburn, and Steven Swanson. Providing safe, user space access to fast, solid state disks. *ACM SIGARCH Computer Architecture News*, 40(1):387–400, March 2012. ASPLOS '12 conference proceedings.

Cain:2013:RAS

[CMF+13] Harold W. Cain, Maged M. Michael, Brad Frey, Cathy May, Derek Williams, and Hung Le. Robust architectural support for transactional memory in the Power architecture. *ACM SIGARCH Computer Architecture News*, 41 (3):225–236, June 2013. ICSA '13 conference proceedings.

Cristal:2004:CRC

[CMLV04] Adrián Cristal, José F. Martínez, Josep Llosa, and Mateo Valero. A case for resource-conscious out-of-order processors: towards kilo-instruction in-flight processors. *ACM SIGARCH Computer Architecture News*, 32(3):3–10, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chung:2006:TTM

[CMM+06] JaeWoong Chung, Chi Cao Minh, Austen McDonald, Travis Skare, Hassan Chafi, Brian D. Carlstrom, Christos Kozyrakis, and Kunle Olukotun. Tradeoffs in transactional memory virtualization. *ACM SIGARCH Computer Architecture News*, 34(5):371–381, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Conte:1995:OIF

[CMMP95] Thomas M. Conte, Kishore N. Menezes, Patrick M. Mills, and Burzin A. Patel. Optimization of instruction fetch mechanisms for high issue rates. *ACM SIGARCH Computer Architecture News*, 23(2):333–344, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chow:1988:HNH

[CMP+88] E. Chow, H. Madan, J. Peterson, D. Grunwald, and D. Reed. Hyperswitch network for the hypercube computer. *ACM SIGARCH Computer Architecture News*, 16 (2):90–99, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Civera:1987:EVP

[CMPZ87] P. L. Civera, F. Maddaleno, G. L. Piccinini, and M. Zamboni. An experimental VLSI Prolog interpreter: preliminary measurements and results. *ACM SIGARCH Computer Architecture News*, 15 (2):117–126, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheng:2006:IAC

[CMR+06] Liqun Cheng, Naveen Muralimanohar, Karthik Ramani, Rajeev Balasubramonian, and John B. Carter. Interconnect-aware coherence protocols for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 34(2):339–351, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:2012:TGE

[CMR+12] Jichuan Chang, Justin Meza, Parthasarathy Ranganathan, Amip Shah, Rocky Shih, and Cullen Bash. Totally green: evaluating and designing servers for lifecycle environmental impact. *ACM SIGARCH Computer Architecture News*, 40(1):25–36, March 2012. ASPLOS '12 conference proceedings.

Cintra:2000:ASS

[CMT00] Marcelo Cintra, José F. Martínez, and Josep Torrellas. Architectural support for scalable speculative parallelization in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 28(2):13–24, May 2000. CO-

DEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Conte:1991:BSB

[CmWH91] Thomas M. Conte and Wen mei W. Hwu. A brief survey of benchmark usage in the architecture community. *ACM SIGARCH Computer Architecture News*, 19 (4):37–44, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Colwell:1987:VAT

[CNO+87] Robert P. Colwell, Robert P. Nix, John J. O'Donnell, David B. Papworth, and Paul K. Rodman. A VLIW architecture for a trace scheduling compiler. *ACM SIGARCH Computer Architecture News*, 15(5):180–192, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chuang:2006:UPB

[CNV+06] Weihaw Chuang, Satish Narayanasamy, Ganesh Venkatesh, Jack Sampson, Michael Van Biesbrouck, Gilles Pokam, Brad Calder, and Osvaldo Colavin. Unbounded page-based transactional memory. *ACM SIGARCH Computer Architecture News*, 34(5):347–358, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Castan:1982:HRP

[CO82] M. Castan and E. I. Organick. μ3L: an HLL-RISC processor for parallel execution of FP-language programs. *ACM SIGARCH Computer Architecture News*, 10(3):239–247, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2003:JSD

[CO03] Michael K. Chen and Kunle Olukotun. The Jrpm system for dynamically parallelizing Java programs. *ACM SIGARCH Computer Architecture News*, 31(2):434–446, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cockcroft:1996:P

[Coc96] Adrian Cockcroft. I/O potholes. *ACM SIGARCH Computer Architecture News*, 24 (4):18–19, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Casper:2011:HAT

[COH+11] Jared Casper, Tayo Oguntebi, Sungpack Hong, Nathan G. Bronson, Christos Kozyrakis, and Kunle Olukotun. Hardware acceleration of transactional memory on commodity systems. *ACM SIGARCH Computer Architecture News*, 39(1):27–38, March 2011. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Colwell:1988:BRC

[Col88] Robert P. Colwell. Book review: *Computer Architecture and Organization*, 2nd ed. by John P. Hayes (McGraw Hill, 1988). *ACM SIGARCH Computer Architecture News*, 16 (4):193–195, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Colwell:1990:BRH

[Col90] Robert P. Colwell. Book review: *High-Level Language Computer Architecture* edited by Veljko Milutinovic (Computer Science Press, 1989). *ACM SIGARCH Computer Architecture News*, 18(1):120–122, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Contessa:1988:AFT

[Con88] Alessandro Contessa. An approach to fault tolerance and error recovery in a parallel graph reduction machine: MaRS—a case study. *ACM SIGARCH Computer Architecture News*, 16(3):25–32, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cooper:1973:MMB

[Coo73] Richard G. Cooper. Micromodules: Microprogrammable building blocks for hardware development. *ACM SIGARCH Computer Architecture News*, 2(4):221–226, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Copeland:1978:SSS

[Cop78] George P. Copeland. String storage and searching for data base applications: implementation on the INDY backend kernel. *ACM SIGARCH Computer Architecture News*, 7(2): 8–17, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cornett:1989:UMS

[Cor89] F. Cornett. The UT1000 microprogramming simulator: an educational tool. *ACM SIGARCH Computer Architecture News*, 17(4):111–118, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cousins:1989:DCR

[Cou89] R. Cousins. DMA considerations on RISC workstations. *ACM SIGARCH Computer Architecture News*, 17(5):16–23, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cousins:1990:NAC

[Cou90a] Robert Cousins. A novel approach to character interfaces. *ACM SIGARCH Computer Architecture News*, 18

(1):35, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cousins:1990:RPI

[Cou90b] Robert Cousins. A reentrant peripheral interface. *ACM SIGARCH Computer Architecture News*, 18(1):43, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cox:1979:NCA

[Cox79] Lyle A. Cox, Jr. The nature of "computer architecture". *ACM SIGARCH Computer Architecture News*, 7(7): 8–12, April 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1990:MPS

[CP90] Peter M. Chen and David A. Patterson. Maximizing performance in a striped disk array. *ACM SIGARCH Computer Architecture News*, 18(3a): 322–331, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chung:1998:LBC

[CP98] Byung-Kwon Chung and Jih-Kwon Peir. LRU-based column-associative caches. *ACM SIGARCH Computer Architecture News*, 26(2):9–17, May 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Crago:2011:OEM

[CP11] Neal Clayton Crago and Sanjay Jeram Patel. OUTRIDER: efficient memory latency tolerance with decoupled strands. *ACM SIGARCH Computer Architecture News*, 39(3):117–128, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Carretero:1996:MPD

[CPdM+96] J. Carretero, F. Pérez, P. de Miguel, F. García, and L. Alonso. A massively parallel and distributed I/O subsystem. *ACM SIGARCH Computer Architecture News*, 24 (3):1–8, June 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2017:AGH

[CPI17] Sui Chen, Lu Peng, and Samuel Irving. Accelerating GPU hardware transactional memory with snapshot isolation. *ACM SIGARCH Computer Architecture News*, 45 (2):282–294, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Choi:2008:ABP

[CPT08] Bumyong Choi, Leo Porter, and Dean M. Tullsen. Accurate branch prediction for short threads. *ACM SIGARCH Computer Architecture News*, 36(1):125–134, March 2008. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chishti:2005:ORC

[CPV05] Zeshan Chishti, Michael D. Powell, and T. N. Vijaykumar. Optimizing replication, communication, and capacity allocation in CMPs. *ACM SIGARCH Computer Architecture News*, 33(2):357–368, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cunningham:1994:LDT

[CR94] Daniel K. Cunningham and Steven J. Reilly. Leading the design team—the evolution of the technical writer from a support role to a design role. *ACM SIGARCH Computer Architecture News*, 22(5):56–60, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cragon:1979:ECS

[Cra79] Harvey G. Cragon. An evaluation of code space requirements and performance of various architectures. *ACM SIGARCH Computer Architecture News*, 7(5):5–21, February 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cragon:1983:EIS

[Cra83] Harvey Cragon. Executable instruction set specification. *ACM SIGARCH Computer Architecture News*, 11(1):25–43, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cragon:1985:ADS

[Cra85] Harvey G. Cragon. An architecture design system. *ACM SIGARCH Computer Architecture News*, 13(4):15–21, September 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Crawford:1988:EHH

[Cra88] Chuck Crawford. Evolution of the Harris H-series computers and speculations on their future. *ACM SIGARCH Computer Architecture News*, 16 (3):33–39, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cuesta:2011:IED

[CRG+11] Blas A. Cuesta, Alberto Ros, María E. Gómez, Antonio Robles, and José F. Duato. Increasing the effectiveness of directory caches by deactivating coherence for private memory blocks. *ACM SIGARCH Computer Architecture News*, 39(3):93–104, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cunha:1991:AMM

[CRM91] Alberto R. Cunha, Carlos N. Ribeiro, and José A. Marques. The architecture of a memory management unit for object-oriented systems. *ACM SIGARCH Computer Architecture News*, 19(4):109–116, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Calder:1999:SVP

[CRT99] Brad Calder, Glenn Reinman, and Dean M. Tullsen. Selective value prediction. *ACM SIGARCH Computer Architecture News*, 27(2):64–74, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chisnall:2015:BPA

[CRW+15] David Chisnall, Colin Rothwell, Robert N. M. Watson, Jonathan Woodruff, Munraj Vadera, Simon W. Moore, Michael Roe, Brooks Davis, and Peter G. Neumann. Beyond the PDP-11: Architectural support for a memory-safe C abstract machine. *ACM SIGARCH Computer Architecture News*, 43(1):117–130, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Clark:1980:CCR

[CS80a] Douglas W. Clark and William D. Strecker. Comments on "The Case for the Reduced Instruction Set Computer," by Patterson and Ditzel. *ACM SIGARCH Computer Architecture News*, 8(6):34–38, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Coffman:1980:CBS

[CS80b] E. G. Coffman, Jr. and Kimming So. On the comparison between single and multiple processor systems. *ACM SIGARCH Computer Architecture News*, 8(3):72–79, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1989:TMH

[CS89] M.-S. Chen and K. G. Shin. Task migration in hypercube multiprocessors. *ACM SIGARCH Computer Architecture News*, 17(3):105–111, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1994:UAT

[CS94] C.-H. Chen and A. K. Somani. A unified architectural tradeoff methodology. *ACM SIGARCH Computer Architecture News*, 22(2):348–357, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Carr:1999:ISP

[CS99] Steve Carr and Philip Sweany. Improving software pipelining with hardware support for self-spatial loads. *ACM SIGARCH Computer Architecture News*, 27(1):55–58, March 1999. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chou:2000:IPC

[CS00] Yuan Chou and John Paul Shen. Instruction path coprocessors. *ACM SIGARCH Computer Architecture News*, 28(2):270–281, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:2006:CCC

[CS06a] Jichuan Chang and Gurindar S. Sohi. Cooperative caching for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 34(2):264–276, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chiyonobu:2006:EEI

[CS06b] Akihiro Chiyonobu and Toshinori Sato. Energy-efficient instruction scheduling utilizing cache miss information. *ACM SIGARCH Computer Architecture News*, 34(1):65–70, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chakraborty:2011:CBS

[CS11a] Anindita Chakraborty and Amitabha Sinha. Conversion of binary to single-term triple base numbers for DSP applications. *ACM SIGARCH Computer Architecture News*, 39 (5):5–11, December 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chhabra:2011:NSN

[CS11b] Siddhartha Chhabra and Yan Solihin. i-NVMM: a secure non-volatile main memory system with incremental encryption. *ACM SIGARCH Computer Architecture News*, 39 (3):177–188, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Caulfield:2013:QSA

[CS13a] Adrian M. Caulfield and Steven Swanson. QuickSAN: a storage area network for fast, distributed, solid state disks. *ACM SIGARCH Computer Architecture News*, 41 (3):464–474, June 2013. ICSA '13 conference proceedings.

Checkoway:2013:IAW

[CS13b] Stephen Checkoway and Hovav Shacham. Iago attacks: why the system call API is a bad untrusted RPC interface. *ACM SIGARCH Computer Architecture News*, 41 (1):253–264, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cheriton:1986:SCC

[CSB86] D. R. Cheriton, G. A. Slavenburg, and P. D. Boyle. Software-controlled caches in the VMP multiprocessor. *ACM SIGARCH Computer*

Architecture News, 14(2):366–374, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Calciu:2017:BBC

[CSBA17a] Irina Calciu, Siddhartha Sen, Mahesh Balakrishnan, and Marcos K. Aguilera. Black-box concurrent data structures for NUMA architectures. *ACM SIGARCH Computer Architecture News*, 45 (1):207–221, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Churchill:2017:SLS

[CSBA17b] Berkeley Churchill, Rahul Sharma, JF Bastien, and Alex Aiken. Sound loop superoptimization for Google Native Client. *ACM SIGARCH Computer Architecture News*, 45 (1):313–326, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Choi:2017:SAS

[CSGT17] Jiho Choi, Thomas Shull, Maria J. Garzaran, and Josep Torrellas. ShortCut: Architectural support for fast object access in scripting languages. *ACM SIGARCH Computer Architecture News*, 45(2):494–506, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chakradhar:2010:DCC

[CSJC10] Srimat Chakradhar, Murugan Sankaradas, Venkata Jakkula, and Srihari Cadambi. A dynamically configurable coprocessor for convolutional neural networks. *ACM SIGARCH Computer Architecture News*, 38(3):247–257, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chappell:1999:SSM

[CSK+99] Robert S. Chappell, Jared Stark, Sangwook P. Kim, Steven K. Reinhardt, and Yale N. Patt. Simultaneous subordinate microthreading (SSMT). *ACM SIGARCH Computer Architecture News*, 27(2):186–195, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Constantinou:2005:PIS

[CSM+05] Theofanis Constantinou, Yiannakis Sazeides, Pierre Michaud, Damien Fetis, and Andre Seznec. Performance implications of single thread migration on a chip multi-core. *ACM SIGARCH Computer Architecture News*, 33(4):80–91, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Culler:1991:FGP

[CSS+91] David E. Culler, Anurag Sah, Klaus E. Schauser, Thorsten von Eicken, and John Wawrzynek. Fine-grain parallelism with minimal hardware support: a compiler-controlled threaded abstract machine. *ACM SIGARCH Computer Architecture News*, 19(2):164–175, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheung:1987:OAG

[CSSP87] K. Cheung, G. Sohi, K. Saluja, and D. Pradhan. Organization and analysis of a gracefully-degrading interleaved memory system. *ACM SIGARCH Computer Architecture News*, 15(2):224–231, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chan:1994:ECF

[CSW94] Yin Chan, Ashok Sudarsanam, and Andrew Wolfe. The effect of compiler-flag tuning on SPEC benchmark performance. *ACM SIGARCH Computer Architecture News*, 22(4):60–70, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:1990:ISG

[CSY90] Ding-Kai Chen, Hong-Men Su, and Pen-Chung Yew. The impact of synchronization and granularity on parallel systems. *ACM SIGARCH Computer Architecture News*, 18(3a):239–248, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cornell:1974:CGP

[CT74] R. G. Cornell and H. C. Torng. A cellular general purpose computer. *ACM SIGARCH Computer Architecture News*, 3(4):207–213, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chuang:1990:DPA

[CT90] Po-Jen Chuang and Nian-Feng Tzeng. Dynamic processor allocation in hypercube computers. *ACM SIGARCH Computer Architecture News*, 18(3a):40–49, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cederman:2008:SLB

[CT08] Daniel Cederman and Philippas Tsigas. On sorting and load balancing on GPUs. *ACM SIGARCH Computer Architecture News*, 36(5):11–18, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chien:2015:CSH

[CTHV+15] Andrew A. Chien, Tung Thanh-Hoang, Dilip Vasudevan, Yuanwei Fang, and Amirali Shambayati. 10×10: a case study in highly-programmable and energy-efficient heterogeneous federated architecture. *ACM SIGARCH Computer Architecture News*, 43(3):2–9, May 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ceze:2007:BBE

[CTMT07] Luis Ceze, James Tuck, Pablo Montesinos, and Josep Torrellas. BulkSC: bulk enforcement of sequential consistency. *ACM SIGARCH Computer Architecture News*, 35(2):278–289, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ceze:2006:BDS

[CTTC06] Luis Ceze, James Tuck, Josep Torrellas, and Calin Cascaval. Bulk disambiguation of speculative threads in multiprocessors. *ACM SIGARCH Computer Architecture News*, 34 (2):227–238, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chau:2013:ASM

[CTW+13] Thomas C. P. Chau, James S. Targett, Marlon Wijeyasinghe, Wayne Luk, Peter Y. K. Cheung, Benjamin Cope, Alison Eele, and Jan Maciejowski. Accelerating sequential Monte Carlo method for real-time air traffic management. *ACM SIGARCH Computer Architecture News*, 41(5):35–40, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chappell:2002:DPB

[CTYP02] Robert S. Chappell, Francis Tseng, Adi Yoaz, and Yale N. Patt. Difficult-path branch prediction using subordinate microthreads. *ACM SIGARCH Computer Architecture News*, 30(2):307–317, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cheong:1988:CCS

[CV88] H. Cheong and A. V. Vaidenbaum. A cache coherence scheme with fast selective invalidation. *ACM SIGARCH Computer Architecture News*, 16(2):299–307, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Cvetanovic:2003:PAA

[Cve03] Zarka Cvetanovic. Performance analysis of the Alpha 21364-based HP GS1280 multiprocessor. *ACM SIGARCH Computer Architecture News*, 31(2):218–229, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chang:2002:ATI

[CW02] Fu-Chi Chang and Chia-Jiu Wang. Architectural tradeoff in implementing RSA processors. *ACM SIGARCH Computer Architecture News*, 30

(1):5–11, March 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Crandall:2006:TSD

[CWdO+06] Jedidiah R. Crandall, Gary Wassermann, Daniela A. S. de Oliveira, Zhendong Su, S. Felix Wu, and Frederic T. Chong. Temporal search: detecting hidden malware timebombs with virtual machines. *ACM SIGARCH Computer Architecture News*, 34(5):25–36, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chakraborty:2006:CSE

[CWS06] Koushik Chakraborty, Philip M. Wells, and Gurindar S. Sohi. Computation spreading: employing hardware migration to specialize CMP cores on-the-fly. *ACM SIGARCH Computer Architecture News*, 34 (5):283–292, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Choudhary:2011:FCS

[CWS+11] Niket K. Choudhary, Salil V. Wadhavkar, Tanmay A. Shah, Hiran Mayukh, Jayneel Gandhi, Brandon H. Dwiel, Sandeep Navada, Hashem H. Najaf-abadi, and Eric Rotenberg. FabScalar: composing synthesizable RTL designs of arbitrary cores within a canonical superscalar template. *ACM SIGARCH Computer Architecture News*, 39 (3):11–22, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Collins:2001:SPL

[CWT+01] Jamison D. Collins, Hong Wang, Dean M. Tullsen, Christopher Hughes, Yong-Fong Lee, Dan Lavery, and John P. Shen. Speculative precomputation: long-range prefetching of delinquent loads. *ACM SIGARCH Computer Architecture News*, 29 (2):14–25, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2008:SSP

[CWY+08] Haibo Chen, Xi Wu, Liwei Yuan, Binyu Zang, Pen chung Yew, and Frederic T. Chong. From speculation to security: Practical and efficient information flow tracking using speculative hardware. *ACM SIGARCH Computer Architecture News*, 36(3):401–412, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Choi:1996:CHS

[CY96] Lynn Choi and Pen-Chung Yew. Compiler and hardware support for cache coherence in large-scale multiprocessors: design considerations and performance study. *ACM SIGARCH Computer Archi-*

tecture News, 24(2):283–294, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Choi:2006:LBS

[CY06] Seungryul Choi and Donald Yeung. Learning-based SMT processor resource distribution via hill-climbing. *ACM SIGARCH Computer Architecture News*, 34(2):239–251, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2017:PPQ

[CYG+17] Quan Chen, Hailong Yang, Minyi Guo, Ram Srivatsa Kannan, Jason Mars, and Lingjia Tang. Prophet: Precise QoS prediction on non-preemptive accelerators to improve utilization in warehouse-scale computers. *ACM SIGARCH Computer Architecture News*, 45(1):17–32, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chen:2011:DSE

[CYH+11] Junying Chen, Billy Y. S. Yiu, Brandon K. Hamilton, Alfred C. H. Yu, and Hayden K.-H. So. Design space exploration of adaptive beamforming acceleration for bedside and portable medical ultrasound imaging. *ACM SIGARCH Computer Architecture News*, 39(4):20–25, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cho:1999:DLV

[CYL99] Sangyeun Cho, Pen-Chung Yew, and Gyungho Lee. Decoupling local variable accesses in a wide-issue superscalar processor. *ACM SIGARCH Computer Architecture News*, 27(2):100–110, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Chen:2016:BQA

[CYMT16] Quan Chen, Hailong Yang, Jason Mars, and Lingjia Tang. Baymax: QoS awareness and increased utilization for non-preemptive accelerators in warehouse scale computers. *ACM SIGARCH Computer Architecture News*, 44(2):681–696, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Chen:2014:MLC

[CZ14] Long Chen and Zhao Zhang. MemGuard: a low cost and energy efficient design to support and enhance memory system reliability. *ACM SIGARCH Computer Architecture News*, 42(3):49–60, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Colp:2015:PDS

[CZG+15] Patrick Colp, Jiawen Zhang, James Gleeson, Sahil Suneja, Eyal de Lara, Himanshu Raj, Stefan Saroiu, and Alec Wolman. Protecting data on Smartphones and tablets from memory attacks. *ACM SIGARCH Computer Architecture News*, 43(1):177–189, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Cheng:2016:LLB

[CZS+16] Hsiang-Yun Cheng, Jishen Zhao, Jack Sampson, Mary Jane Irwin, Aamer Jaleel, Yu Lu, and Yuan Xie. LAP: loop-block aware inclusion properties for energy-efficient asymmetric last level caches. *ACM SIGARCH Computer Architecture News*, 44(3): 103–114, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dahlgren:1995:BPH

[Dah95] Fredrik Dahlgren. Boosting the performance of hybrid snooping cache protocols. *ACM SIGARCH Computer Architecture News*, 23 (2):60–69, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:1989:MOF

[Dal89] W. J. Dally. Micro-optimization of floating-point operations. *ACM SIGARCH Computer Architecture News*, 17(2):283–289, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:1990:VCF

[Dal90] William J. Dally. Virtual-channel flow control. *ACM SIGARCH Computer Architecture News*, 18(3a):60–68, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:2010:MNC

[Dal10] William J. Dally. Moving the needle, computer architecture research in academe and industry. *ACM SIGARCH Computer Architecture News*, 38(3):1, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Danesh:1993:PLC

[Dan93] Iraj Danesh. Physical limitations of a computer. *ACM SIGARCH Computer Architecture News*, 21(3):40–45, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dasgupta:1977:DSL

[Das77] Subrata Dasgupta. The design of some language constructs for horizontal microprogramming. *ACM SIGARCH Computer Architecture News*, 5(7): 10–16, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dasgupta:1983:VCA

[Das83] Subrata Dasgupta. On the verification of computer architectures using an architecture description language. *ACM SIGARCH Computer Architecture News*, 11(3):32–38, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davidson:1980:MSM

[Dav80a] Edward S. Davidson. A multiple stream microprocessor prototype system: AMP-1. *ACM SIGARCH Computer Architecture News*, 8(3):9–16, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davies:1980:CAM

[Dav80b] Julian Davies. Clock architecture and management. *ACM SIGARCH Computer Architecture News*, 8(5):3–6, August 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davis:2014:IWA

[Dav14] Al Davis. Inside Windows Azure: the challenges and opportunities of a cloud operating system. *ACM SIGARCH Computer Architecture News*, 42(1):1–2, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dubois:1982:ECC

[DB82] Michel Dubois and Fayė A. Briggs. Effects of cache coherency in multiprocessors. *ACM SIGARCH Computer Architecture News*, 10(3):299–308, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Duesterwald:2000:SPH

[DB00] Evelyn Duesterwald and Vasanth Bala. Software profiling for hot path prediction: less is more. *ACM SIGARCH Computer Architecture News*, 28 (5):202–211, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Deris:2007:ICE

[DB07] Kaveh Jokar Deris and Amirali Baniasadi. Investigating cache energy and latency break-even points in high performance processors. *ACM SIGARCH Computer Architecture News*, 35(4):13–20, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Desikan:2002:EME

[DBK+02] Rajagopalan Desikan, Doug Burger, Stephen W. Keckler, Llorenc Cruz, Fernando Latorre, Antonio González, and Mateo Valero. Errata on "Measuring Experimental Error in Microprocessor Simulation". *ACM SIGARCH Computer Architecture News*, 30

(1):2–4, March 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dennis:1980:BBD

[DBL80] Jack B. Dennis, G. Andrew Boughton, and Clement K. C. Leung. Building blocks for data flow prototypes. *ACM SIGARCH Computer Architecture News*, 8(3):1–8, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Devietti:2008:HAS

[DBMZ08] Joe Devietti, Colin Blundell, Milo M. K. Martin, and Steve Zdancewic. Hardbound: architectural support for spatial safety of the C programming language. *ACM SIGARCH Computer Architecture News*, 36(1):103–114, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Denehy:2004:DSA

[DBP+04] Timothy E. Denehy, John Bent, Florentina I. Popovici, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Deconstructing storage arrays. *ACM SIGARCH Computer Architecture News*, 32(5):59–71, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Diaz:2009:SCE

[DC09] Pedro Diaz and Marcelo Cintra. Stream chaining: exploiting multiple levels of correlation in data prefetching. *ACM SIGARCH Computer Architecture News*, 37(3):81–92, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeHon:1994:MRA

[DCB+94] A. DeHon, F. Chong, M. Becker, E. Egozy, H. Minsky, S. Peretz, and T. F. Knight, Jr. METRO: a router architecture for high-performance, short-haul routing networks. *ACM SIGARCH Computer Architecture News*, 22(2):266–277, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:1987:AMD

[DCC+87] W. J. Dally, L. Chao, A. Chien, S. Hassoun, W. Horwat, J. Kaplan, P. Song, B. Totty, and S. Wills. Architecture of a message-driven processor. *ACM SIGARCH Computer Architecture News*, 15(2):189–196, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:1998:AMD

[DCC+98] William J. Dally, Linda Chao, Andrew Chien, Soha Hassoun, Waldemar Horwat, Jon Kaplan, Paul Song, Brian Totty, and Scott Wills. Architecture of a message-driven processor. In ACM [ACM98a], pages 337–344. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3.

LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Dally:1998:RJM

[DCF+98] William J. Dally, Andrew Chien, Stuart Fiske, Waldemar Horwat, Richard Lethin, Michael Noakes, Peter Nuth, Ellen Spertus, Deborah Wallach, D. Scott Wills, Andrew Chang, and John Keen. Retrospective: The J-machine. In ACM [ACM98a], pages 54–58. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Daya:2014:SCR

[DCS+14] Bhavya K. Daya, Chia-Hsin Owen Chen, Suvinay Subramanian, Woo-Cheol Kwon, Sunghyun Park, Tushar Krishna, Jim Holt, Anantha P. Chandrakasan, and Li-Shiuan Peh. SCORPIO: a 36-core research chip demonstrating snoopy coherence on a scalable mesh NoC with in-network ordering. *ACM SIGARCH Computer Architecture News*, 42 (3):25–36, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dalessandro:2011:HNC

[DCW+11] Luke Dalessandro, François Carouge, Sean White, Yossi Lev, Mark Moir, Michael L. Scott, and Michael F. Spear. Hybrid NOrec: a case study in the effectiveness of best effort hardware transactional memory. *ACM SIGARCH Computer Architecture News*, 39(1):39–52, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Denning:1980:MCS

[DD80] Peter J. Denning and T. Don Dennis. On minimizing contention at semaphores. *ACM SIGARCH Computer Architecture News*, 8(2):12–19, April 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dayde:1990:UPL

[DD90] M. J. Daydé and I. S. Duff. Use of parallel level 3 BLAS in LU factorization on three vector multiprocessors the ALLIANT FX/80, the CRAY-2, and the IBM 3090 VF. *ACM SIGARCH Computer Architecture News*, 18(3b):82–95, September 1990. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

deDinechin:2013:FPT

[dDIS13] Florent de Dinechin, Matei Istoan, and Guillaume Sergent. Fixed-point trigonometric functions on FPGAs. *ACM SIGARCH Computer Architecture News*, 41(5):83–88, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Didona:2016:PAM

[DDK+16] Diego Didona, Nuno Diegues, Anne-Marie Kermarrec, Rachid Guerraoui, Ricardo Neves, and Paolo Romano. ProteusTM: Abstraction meets performance in transactional memory. *ACM SIGARCH Computer Architecture News*, 44(2):757–771, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Drumond:2017:MDE

[DDM+17] Mario Drumond, Alexandros Daglis, Nooshin Mirzadeh, Dmitrii Ustiugov, Javier Picorel, Babak Falsafi, Boris Grot, and Dionisios Pnevmatikatos. The Mondrian Data Engine. *ACM SIGARCH Computer Architecture News*, 45(2):639–651, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dobry:1985:PSP

[DDP85] T. P. Dobry, A. M. Despain, and Y. N. Patt. Performance studies of a Prolog machine architecture. *ACM SIGARCH Computer Architecture News*, 13(3):180–190, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dahlgren:1994:CPG

[DDS94] F. Dahlgren, M. Dubois, and P. Stenström. Combined performance gains of simple cache protocol extensions. *ACM SIGARCH Computer Architecture News*, 22(2):187–197, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dao:1995:CFC

[DDY95] Binh Vien Dao, Jose Duato, and Sudhakar Yalamanchili. Configurable flow control mechanisms for fault-tolerant routing. *ACM SIGARCH Computer Architecture News*, 23(2):220–229, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DePrycker:1981:NIM

[De 81] Martin L. De Prycker. A new index mode for the VAX-11. *ACM SIGARCH Computer Architecture News*, 9(2):10–11, April 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeGloria:1990:VVI

[De 90] Alessandro De Gloria. VISA: a variable instruction set architecture. *ACM SIGARCH Computer Architecture News*, 18(2):76–84, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Debaere:1989:IPC

[Deb89] E. H. Debaere. Instruction-path coprocessing to solve some RISC problems. *ACM SIGARCH Computer Architecture News*, 17(5):83–94, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeMone:1996:RWD

[DeM96] Paul W. DeMone. Register windows and delay slots. *ACM SIGARCH Computer Architecture News*, 24(4):21–22, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dennis:1976:CAC

[Den76] Jack B. Dennis. Computer architecture and the cost of software. *ACM SIGARCH Computer Architecture News*, 5(1): 17–21, April 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Denning:1980:WIC

[Den80] Peter J. Denning. Why not innovations in computer architecture? *ACM SIGARCH Computer Architecture News*, 8(2):4–7, April 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dennis:1998:RPA

[Den98] Jack B. Dennis. Retrospective: a preliminary architecture for a basic data flow processor. In ACM [ACM98a], pages 2–4. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Dennis:2003:FBM

[Den03] Jack B. Dennis. Fresh Breeze: a multiprocessor chip architecture guided by modular programming principles. *ACM SIGARCH Computer Architecture News*, 31(1):7–15, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DuBois:2013:CSI

[DESE13] Kristof Du Bois, Stijn Eyerman, Jennifer B. Sartor, and Lieven Eeckhout. Criticality stacks: identifying critical threads in parallel programs using synchronization behavior. *ACM SIGARCH Computer Architecture News*, 41

(3):511–522, June 2013. ICSA '13 conference proceedings.

Dai:2000:LSO

[DET00] Min Dai, Christine Eisenbeis, and Sid-Ahmed-Ali Touati. Load-store optimization for software pipelining. *ACM SIGARCH Computer Architecture News*, 28(1):3–10, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Deville:1990:LCU

[Dev90] Yannick Deville. A low-cost usage-based replacement algorithm for cache memories. *ACM SIGARCH Computer Architecture News*, 18(4):52–58, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Deville:1993:PDP

[Dev93] Yannick Deville. A process-dependent partitioning strategy for cache memories. *ACM SIGARCH Computer Architecture News*, 21(1):26–33, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeGloria:1992:ILP

[DF92] Alessandro De Gloria and Paolo Faraboschi. Instruction-level parallelism in Prolog: analysis and architectural support. *ACM SIGARCH Computer Architecture News*, 20(2):224–233, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dashti:2013:TMH

[DFF+13] Mohammad Dashti, Alexandra Fedorova, Justin Funston, Fabien Gaud, Renaud Lachaize, Baptiste Lepers, Vivien Quema, and Mark Roth. Traffic management: a holistic approach to memory placement on NUMA systems. *ACM SIGARCH Computer Architecture News*, 41 (1):381–394, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Deng:2017:LLH

[DFKC17] Zhaoxia Deng, Ariel Feldman, Stuart A. Kurtz, and Frederic T. Chong. Lemonade from lemons: Harnessing device wearout to create limited-use security architectures. *ACM SIGARCH Computer Architecture News*, 45(2):361–374, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Davis:2005:RRA

[DFL05] John D. Davis, Cong Fu, and James Laudon. The RASE (Rapid, Accurate Simulation Environment) for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 33(4):14–23, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Damron:2006:HTM

[DFL06] Peter Damron, Alexandra Fedorova, and Yossi Lev. Hybrid transactional memory. *ACM SIGARCH Computer Architecture News*, 34(5):336–346, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sa:2017:UOA

[DFRO17] Christopher De Sa, Matthew Feldman, Christopher Ré, and Kunle Olukotun. Understanding and optimizing asynchronous low-precision stochastic gradient descent. *ACM SIGARCH Computer Architecture News*, 45(2): 561–574, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

DuBose:1986:MR

[DFT86] D. K. DuBose, D. K. Fotakis, and D. Tabak. A microcoded RISC. *ACM SIGARCH Computer Architecture News*, 14 (3):5–16, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dai:1990:BAS

[DG90] Kechang Dai and Wolfgang K. Giloi. A basic architecture supporting LGDG computation. *ACM SIGARCH Computer Architecture News*, 18 (3b):23–33, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Deville:1992:CRP

[DG92] Yannick Deville and Jean Gobert. A class of replacement policies for medium and high-associativity structures. *ACM SIGARCH Computer Architecture News*, 20(1):55–64, March 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeWitt:1999:PTL

[DG99] Anthony DeWitt and Thomas Gross. The potential of thread-level speculation based on value profiling. *ACM SIGARCH Computer Architecture News*, 27(1):22, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Diniz:2007:LPC

[DGMB07] Bruno Diniz, Dorgival Guedes, Wagner Meira, Jr., and Ricardo Bianchini. Limiting the power consumption of main memory. *ACM SIGARCH Computer Architecture News*, 35(2):290–301, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

David:2015:ACS

[DGT15] Tudor David, Rachid Guerraoui, and Vasileios Trigonakis. Asynchronized concurrency: The secret to scaling concurrent search data structures. *ACM SIGARCH Computer Architecture News*, 43

(1):631–644, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

David:1989:EIB

[DGY89] Llana David, Ran Ginosar, and Michael Yoeli. An efficient implementation of Boolean functions and finite state machine as self-timed circuit. *ACM SIGARCH Computer Architecture News*, 17(6):91–104, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Driesen:1998:AIB

[DH98] Karel Driesen and Urs Hölzle. Accurate indirect branch prediction. *ACM SIGARCH Computer Architecture News*, 26(3):167–178, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DHollander:2016:HLS

[D'H16] Erik H. D'Hollander. High-level synthesis optimization for blocked floating-point matrix multiplication. *ACM SIGARCH Computer Architecture News*, 44(4):74–79, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dehnert:1989:OLS

[DHB89] James C. Dehnert, Peter Y.-T. Hsu, and Joseph P. Bratt. Overlapped loop support in the Cydra 5. *ACM SIGARCH Computer Architecture News*, 17(2):26–38, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1990:BSV

[DHR+90] David R. Ditzel, John L. Hennessy, Bernie Rudin, Alan Jay Smith, Stephen L. Squires, and Zeke Zalcstein. Big science versus little science—do you have to build it? (panel session). *ACM SIGARCH Computer Architecture News*, 18(3a):136, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dhawan:2015:ASS

[DHR+15] Udit Dhawan, Catalin Hritcu, Raphael Rubin, Nikos Vasilakis, Silviu Chiricescu, Jonathan M. Smith, Thomas F. Knight, Jr., Benjamin C. Pierce, and Andre DeHon. Architectural support for software-defined metadata processing. *ACM SIGARCH Computer Architecture News*, 43 (1):487–502, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Duan:2015:AMF

[DHT15] Yuelu Duan, Nima Honarmand, and Josep Torrellas. Asymmetric memory fences: Optimizing both performance and implementability. *ACM SIGARCH Computer Architecture News*, 43 (1):531–543, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dimpsey:1990:PDD

[DI90] R. T. Dimpsey and R. K. Iyer. Performance degradation due to multiprogramming and system overheads in real workloads: case study on a shared memory multiprocessor. *ACM SIGARCH Computer Architecture News*, 18(3b):227–238, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dimpsey:1991:PPT

[DI91] R. T. Dimpsey and R. K. Iyer. Performance prediction and tuning on a multiprocessor. *ACM SIGARCH Computer Architecture News*, 19(3):190–199, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dickman:1980:TR

[Dic80] Lloyd Dickman. Treasurer's report. *ACM SIGARCH Computer Architecture News*, 8(4): 37–38, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dickman:1981:SB

[Dic81] Lloyd Dickman. SIGARCH business. *ACM SIGARCH Computer Architecture News*, 9(1):7–8, February 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dikotter:1990:BRD

[Dik90] Marc Dikotter. Book review: *The Definition of Standard ML* by R. Milner, M. Torte, R. Harper. *ACM SIGARCH Computer Architecture News*, 18(4):91, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dias:1986:CMS

[DIY86] D. M. Dias, B. R. Iyer, and P. S. Yu. On coupling many small systems for transaction processing. *ACM SIGARCH Computer Architecture News*, 14(2):104–110, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dirik:2009:PPS

[DJ09] Cagdas Dirik and Bruce Jacob. The performance of PC solid-state disks (SSDs) as a function of bandwidth, concurrency, device architecture, and system organization. *ACM SIGARCH Computer Architecture News*, 37(3):279–289, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Duwe:2016:RUF

[DJPK16] Henry Duwe, Xun Jian, Daniel Petrisko, and Rakesh Kumar. Rescuing uncorrectable fault patterns in on-chip memories through error pattern transformation. *ACM SIGARCH Computer Architecture News*, 44(3):634–644, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Durand:1994:DSA

[DJT94] Dannie Durand, Ravi Jain, and David Tseytlin. Distributed scheduling algorithms to improve the performance of parallel data transfers. *ACM SIGARCH Computer Architecture News*, 22 (4):35–40, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dally:1985:OOA

[DK85] William J. Dally and James T. Kajiya. An object oriented architecture. *ACM SIGARCH Computer Architecture News*, 13(3):154–161, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dollan:1989:CSP

[DK89] Apostolos Dollan and Robert F. Krick. The case for the sustained performance computer architecture. *ACM SIGARCH Computer Architecture News*, 17(6):129–136, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Delimitrou:2013:PQA

[DK13] Christina Delimitrou and Christos Kozyrakis. Paragon: QoS-aware scheduling for heterogeneous datacenters. *ACM SIGARCH Computer Architecture News*, 41(1):77–88, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Delimitrou:2014:QRE

[DK14] Christina Delimitrou and Christos Kozyrakis. Quasar: resource-efficient and QoS-aware cluster management. *ACM SIGARCH Computer Architecture News*, 42(1):127–144, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Delimitrou:2016:HRE

[DK16] Christina Delimitrou and Christos Kozyrakis. HCloud: Resource-efficient provisioning in shared cloud systems. *ACM SIGARCH Computer Architecture News*, 44(2):473–488, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Delimitrou:2017:BKW

[DK17] Christina Delimitrou and Christos Kozyrakis. Bolt: I know what you did last summer ... in the cloud. *ACM SIGARCH Computer Architecture News*, 45(1):599–

613, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dwarkadas:1993:ERC

[DKCZ93] Sandhya Dwarkadas, Peter Keleher, Alan L. Cox, and Willy Zwaenepoel. Evaluation of release consistent software distributed shared memory on emerging network technology. *ACM SIGARCH Computer Architecture News*, 21(2):144–155, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dautenhahn:2015:NKO

[DKD+15] Nathan Dautenhahn, Theodoros Kasampalis, Will Dietz, John Criswell, and Vikram Adve. Nested kernel: an operating system architecture for intra-kernel privilege separation. *ACM SIGARCH Computer Architecture News*, 43 (1):191–206, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dalton:2007:RFI

[DKK07] Michael Dalton, Hari Kannan, and Christos Kozyrakis. Raksha: a flexible information flow architecture for software security. *ACM SIGARCH Computer Architecture News*, 35(2):482–493, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

deKruijf:2010:RAF

[dKNS10] Marc de Kruijf, Shuou Nomura, and Karthikeyan Sankaralingam. Relax: an architectural framework for software recovery of hardware faults. *ACM SIGARCH Computer Architecture News*, 38(3):497–508, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeRosa:1987:EBA

[DL87] J. A. DeRosa and H. M. Levy. An evaluation of branch architectures. *ACM SIGARCH Computer Architecture News*, 15(2):10–16, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dubnicki:1992:ABS

[DL92] Czarek Dubnicki and Thomas J. LeBlanc. Adjustable block size coherent caches. *ACM SIGARCH Computer Architecture News*, 20(2):170–180, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

delaChevallerie:2015:FLH

[dlCKK15] David de la Chevallerie, Jens Korinth, and Andreas Koch. ffLink: a lightweight high-performance open-source PCI Express Gen3 interface for reconfigurable accelerators. *ACM SIGARCH Computer Architecture News*, 43(4):34–39, September 2015. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Devietti:2009:DDS

[DLCO09] Joseph Devietti, Brandon Lucia, Luis Ceze, and Mark Oskin. DMP: deterministic shared memory multiprocessing. *ACM SIGARCH Computer Architecture News*, 37 (1):85–96, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dall:2016:AVP

[DLL+16] Christoffer Dall, Shih-Wei Li, Jin Tack Lim, Jason Nieh, and Georgios Koloventzos. ARM virtualization: performance and architectural implications. *ACM SIGARCH Computer Architecture News*, 44 (3):304–316, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dice:2009:EEC

[DLMN09] Dave Dice, Yossi Lev, Mark Moir, and Daniel Nussbaum. Early experience with a commercial hardware transactional memory implementation. *ACM SIGARCH Computer Architecture News*, 37 (1):157–168, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

DeMartinis:1976:SMS

[DLSW76] Manlio DeMartinis, G. Jack Lipovski, Stanley Y. W. Su, and J. K. Watson. A Self Managing Secondary Memory system. *ACM SIGARCH Computer Architecture News*, 4(4):186–194, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dennis:1974:PAB

[DM74] Jack B. Dennis and David P. Misunas. A preliminary architecture for a basic data-flow processor. *ACM SIGARCH Computer Architecture News*, 3(4):126–132, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1982:RAF

[DM82] David R. Ditzel and H. R. McLellan. Register allocation for free: The C machine stack cache. *ACM SIGARCH Computer Architecture News*, 10(2):48–56, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1987:BFC

[DM87] D. R. Ditzel and H. R. McLellan. Branch folding in the CRISP microprocessor: reducing branch delay to zero. *ACM SIGARCH Computer Architecture News*, 15(2):2–8, 1987. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeMara:1991:SPA

[DM91] R. F. DeMara and D. I. Moldovan. The SNAP-1 parallel AI prototype. *ACM SIGARCH Computer Architecture News*, 19(3):2–11, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dennis:1998:PAB

[DM98] Jack B. Dennis and David P. Misunas. A preliminary architecture for a basic data-flow processor. In ACM [ACM98a], pages 125–131. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Donald:2006:TMT

[DM06] James Donald and Margaret Martonosi. Techniques for multicore thermal management: Classification and new exploration. *ACM SIGARCH Computer Architecture News*, 34(2):78–88, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1987:HAC

[DMB87a] D. R. Ditzel, H. R. McLellan, and A. D. Berenbaum. The hardware architecture of the CRISP microprocessor. *ACM SIGARCH Computer Architecture News*, 15(2):309–319, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1987:DTS

[DMB87b] David R. Ditzel, Hubert R. McLellan, and Alan D. Berenbaum. Design tradeoffs to support the C programming language in the CRISP microprocessor. *ACM SIGARCH Computer Architecture News*, 15(5):158–163, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Das:2010:AEP

[DMMD10] Reetuparna Das, Onur Mutlu, Thomas Moscibroda, and Chita R. Das. Aérgia: exploiting packet latency slack in on-chip networks. *ACM SIGARCH Computer Architecture News*, 38(3):106–116, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Deng:2011:MAL

[DMR+11] Qingyuan Deng, David Meisner, Luiz Ramos, Thomas F. Wenisch, and Ricardo Bianchini. MemScale: active low-power modes for main memory. *ACM SIGARCH Computer Architecture News*, 39(1):225–238, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Demme:2013:FOM

[DMS+13] John Demme, Matthew Maycock, Jared Schmitz, Adrian Tang, Adam Waksman, Simha Sethumadhavan, and Salvatore Stolfo. On the feasibility of online malware detection with performance counters. *ACM SIGARCH Computer Architecture News*, 41(3):559–570, June 2013. ICSA '13 conference proceedings.

Duan:2013:WTM

[DMT13] Yuelu Duan, Abdullah Muzahid, and Josep Torrellas. WeeFence: toward making fences free in TSO. *ACM SIGARCH Computer Architecture News*, 41(3):213–224, June 2013. ICSA '13 conference proceedings.

Demme:2012:SCV

[DMWS12] John Demme, Robert Martin, Adam Waksman, and Simha Sethumadhavan. Side-channel vulnerability factor: a metric for measuring information leakage. *ACM SIGARCH Computer Architecture News*, 40(3):106–117, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Dewan:1993:CUM

[DN93] Gautam Dewan and V. S. S. Nair. A case for uniform memory access multiprocessors. *ACM SIGARCH Computer Architecture News*, 21(4):20–26, September 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dall:2014:KAD

[DN14] Christoffer Dall and Jason Nieh. KVM/ ARM: the design and implementation of the Linux ARM hypervisor. *ACM SIGARCH Computer Architecture News*, 42(1):333–348, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Devietti:2011:RRC

[DNB+11] Joseph Devietti, Jacob Nelson, Tom Bergan, Luis Ceze, and Dan Grossman. RCDC: a relaxed consistency deterministic computer. *ACM SIGARCH Computer Architecture News*, 39(1):67–78, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Diep:1995:PEP

[DNS95] Trung A. Diep, Christopher Nelson, and John Paul Shen. Performance evaluation of the PowerPC 620 microarchitecture. *ACM SIGARCH Computer Architecture News*, 23(2):163–174, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Das:2013:CEP

[DNSD13] Reetuparna Das, Satish Narayanasamy, Sudhir K. Satpathy, and Ronald G. Dreslinski. Catnap: energy proportional multiple network-on-chip. *ACM SIGARCH Computer Architecture News*, 41(3):320–331, June 2013. ICSA '13 conference proceedings.

Dasgupta:1982:TFL

[DO82] Subrata Dasgupta and Marius Olafsson. Towards a family of languages for the design and implementation of machine architectures. *ACM SIGARCH Computer Architecture News*, 10(3):158–167, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

deOliveira:2013:WYS

[dOFD+13] Augusto Born de Oliveira, Sebastian Fischmeister, Amer Diwan, Matthias Hauswirth, and Peter F. Sweeney. Why you should care about quantile regression. *ACM SIGARCH Computer Architecture News*, 41(1):207–218, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dongarra:1983:PVC

[Don83] Jack J. Dongarra. Performance of various computers using standard linear equations software in a Fortran environment. *ACM SIGARCH Computer Architecture News*, 11(5):22–27, December 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dongarra:1985:PVC

[Don85] Jack J. Dongarra. Performance of various computers using standard linear equations software in a Fortran environment. *ACM SIGARCH Computer Architecture News*, 13(1):3–11, March 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dongarra:1988:PVC

[Don88] Jack J. Dongarra. Performance of various computers using standard linear equations software in a FORTRAN environment. *ACM SIGARCH Computer Architecture News*, 16(1):47–69, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dongarra:1990:PVC

[Don90] Jack J. Dongarra. Performance of various computers using standard linear equations software. *ACM SIGARCH Computer Architecture News*, 18(1):17, March

1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dongarra:1992:PVC

[Don92] Jack J. Dongarra. Performance of various computers using standard linear equations software. *ACM SIGARCH Computer Architecture News*, 20(3):22–44, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Doran:1975:ICL

[Dor75] R. W. Doran. The International Computers Ltd. ICL2900 computer architecture. *ACM SIGARCH Computer Architecture News*, 4 (3):24–47, September 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Doran:1982:MFC

[Dor82] D. W. Doran. Main frame computer trends. *ACM SIGARCH Computer Architecture News*, 10(6):29–44, December 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dowd:1987:ERV

[Dow87] Martin Dowd. An example RISC vector machine architecture. *ACM SIGARCH Computer Architecture News*, 15(4):16–22, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dowd:1988:ERV

[Dow88a] Martin Dowd. An example RISC vector machine architecture. *ACM SIGARCH Computer Architecture News*, 16(1):91–99, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dowd:1988:RVC

[Dow88b] Martin Dowd. RISC vector CPU's and crossbars in desktops. *ACM SIGARCH Computer Architecture News*, 16(1):100–102, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dowd:1991:HPI

[Dow91] Patrick W. Dowd. High performance interprocessor communication through optical wavelength division multiple access channels. *ACM SIGARCH Computer Architecture News*, 19(3):96–105, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dworak:1976:IIR

[DP76] Paul E. Dworak and Alice C. Parker. An input interface for a real-time digital sound generation system. *ACM SIGARCH Computer Architecture News*, 4(4):68–73, January 1976. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1980:RHL

[DP80] David R. Ditzel and David A. Patterson. Retrospective on high-level language computer architecture. *ACM SIGARCH Computer Architecture News*, 8(3):97–104, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ditzel:1998:RRH

[DP98a] David R. Ditzel and David A. Patterson. Retrospective: a retrospective on high-level language computer architecture. In ACM [ACM98a], pages 13–14. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Ditzel:1998:RHL

[DP98b] David R. Ditzel and David A. Patterson. Retrospective on high-level language computer architecture. In ACM [ACM98a], pages 166–173. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Doudalis:2012:EFU

[DP12] Ioannis Doudalis and Milos Prvulovic. Euripus: a flexible unified hardware memory checkpointing accelerator for bidirectional-debugging and reliability. *ACM SIGARCH Computer Architecture News*, 40(3):261–272, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Dworak:1977:DIR

[DPB77] Paul Dworak, Alice C. Parker, and Richard Blum. The design and implementation of a real-time sound generation system. *ACM SIGARCH Computer Architecture News*, 5(7):153–158, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Despain:1987:A

[DPS+87] A. Despain, Y. Patt, V. Srini, P. Bitar, W. Bush, C. Chien, W. Citrin, B. Fagin, W. Hwu, S. Melvin, R. McGeer, A. Singhal, M. Shebanow, and P. Van Roy. Aquarius. *ACM SIGARCH Computer Architecture News*, 15(1):22–34, March 1987. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DuBois:1991:DED

[DR91] Andrew J. DuBois and John Rasure. Design and evaluation of a distributed asynchronous VLSI crossbar switch controller for a packet switched supercomputer network. *ACM SIGARCH Computer Architecture News*, 19(4):69–79, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

delRosario:1993:IPT

[dRBC93] Juan Miguel del Rosario, Rajesh Bordawekar, and Alok Choudhary. Improved parallel I/O via a two-phase runtime access strategy. *ACM SIGARCH Computer Architecture News*, 21(5):31–38, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davis:2005:CPS

[DRCO05] John D. Davis, Stephen E. Richardson, Charis Charitsis, and Kunle Olukotun. A chip prototyping substrate: the flexible architecture for simulation and testing (FAST). *ACM SIGARCH Computer Architecture News*, 33(4):34–43, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Drew:1994:TTM

[Dre94] Katherine E. Drew. Telecommunicators and telecommuters: making multiple-site documentation projects work. *ACM SIGARCH Computer Architecture News*, 22(5):66–75, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Driker:1999:DCC

[Dri99] Benjamin Driker. Disbursed control computer architecture. *ACM SIGARCH Computer Architecture News*, 27(3):24–31, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Delgado-Rannauro:1989:MDP

[DRR89] S. A. Delgado-Rannauro and T. J. Reynolds. A message driven OR-parallel machine. *ACM SIGARCH Computer Architecture News*, 17(2):217–228, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davis:1985:PAP

[DS85] Nathaniel J. Davis IV and Howard Jay Siegel. The performance analysis of partitioned circuit switched multistage interconnection networks. *ACM SIGARCH Computer Architecture News*, 13(3):387–394, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dibble:1989:BSB

[DS89] P. C. Dibble and M. L. Scott. Beyond striping: the bridge multiprocessor file system. *ACM SIGARCH Computer Architecture News*, 17 (5):32–39, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dubois:1998:RMA

[DS98] Michel Dubois and Christoph Scheurich. Retrospective: Memory access buffering in multiprocessors. In ACM [ACM98a], pages 48–50. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Dhodapkar:2002:MMC

[DS02] Ashutosh S. Dhodapkar and James E. Smith. Managing multi-configuration hardware via dynamic working set analysis. *ACM SIGARCH Computer Architecture News*, 30(2):233–244, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DaSilva:2006:PPA

[DS06] Jeff Da Silva and J. Gregory Steffan. A probabilistic pointer analysis for speculative optimizations. *ACM SIGARCH Computer Architecture News*, 34(5):416–425, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Demme:2011:RIA

[DS11] John Demme and Simha Sethumadhavan. Rapid identification of architectural bottlenecks via precise event counting. *ACM SIGARCH Computer Architecture News*, 39(3):353–364, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dubois:1986:MAB

[DSB86] M. Dubois, C. Scheurich, and F. Briggs. Memory access buffering in multiprocessors. *ACM SIGARCH Computer Architecture News*, 14(2):434–442, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dubois:1998:MAB

[DSB98] Michel Dubois, Christoph Scheurich, and Faye Briggs. Memory access buffering in multiprocessors. In ACM [ACM98a], pages 320–328. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998.

URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Desikan:2004:SSR

[DSBK04] Rajagopalan Desikan, Simha Sethumadhavan, Doug Burger, and Stephen W. Keckler. Scalable selective re-execution for EDGE architectures. *ACM SIGARCH Computer Architecture News*, 32(5):120–132, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davidson:1990:BTO

[DSF+90] Edward S. Davidson, Gurindar S. Sohl, Joseph A. Fisher, Greg Grohoski, Yale Pratt, J. E. Smith, and David R. Stiles. Better than one operation per clock (panel): vectors, VLIW, and superscalar. *ACM SIGARCH Computer Architecture News*, 18(3a):376, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Das:2011:HSR

[DSG11] Malay Das, Amitabha Sinha, and Nishant Kumar Giri. High speed residue number system (RNS) based FIR filter using distributed arithmetic (DA). *ACM SIGARCH Computer Architecture News*, 39 (5):1–4, December 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Drapeau:1994:RIH

[DSH+94] A. L. Drapeau, K. W. Shirriff, J. H. Hartman, E. L. Miller, S. Seshan, R. H. Katz, K. Lutz, D. A. Patterson, E. K. Lee, P. M. Chen, and G. A. Gibson. RAID-II: a high-bandwidth network file server. *ACM SIGARCH Computer Architecture News*, 22(2):234–244, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dohi:2010:IPE

[DSH+10] Keisuke Dohi, Yuichiro Shibata, Tsuyoshi Hamada, Tomonari Masada, Kiyoshi Oguri, and Duncan A. Buell. Implementation of a programming environment with a multithread model for reconfigurable systems. *ACM SIGARCH Computer Architecture News*, 38(4):40–45, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dohi:1982:HSA

[DSM82] Yasunori Dohi, Akira Suzuki, and Noriyuki Matsui. Hardware sorter and its application to data base machine. *ACM SIGARCH Computer Architecture News*, 10(3):218–225, April 1982. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dybdahl:2007:LBR

[DSN07] Haakon Dybdahl, Per Stenström, and Lasse Natvig. An LRU-based replacement algorithm augmented with frequency of access in shared chip-multiprocessor caches. *ACM SIGARCH Computer Architecture News*, 35(4):45–52, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dohi:2011:GIO

[DSOF11] Keisuke Dohi, Yuichiro Shibata, Kiyoshi Oguri, and Takafumi Fujimoto. GPU implementation and optimization of electromagnetic simulation using the FDTD method for antenna designing. *ACM SIGARCH Computer Architecture News*, 39(4):26–31, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Dubois:1993:DEU

[DSR+93] Michel Dubois, Jonas Skeppstedt, Livio Ricciulli, Krishnan Ramamurthy, and Per Stenström. The detection and elimination of useless misses in multiprocessors. *ACM SIGARCH Computer Architecture News*, 21(2):88–97, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dugan:1983:SEA

[Dug83] Robert J. Dugan. System/370 extended architecture: a program view of the channel subsystem. *ACM SIGARCH Computer Architecture News*, 11(3):270–276, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Davidson:1987:EIS

[DV87a] Jack W. Davidson and Richard A. Vaughan. The effect of instruction set complexity on program size and memory performance. *ACM SIGARCH Computer Architecture News*, 15(5):60–64, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Doshi:1987:MSA

[DV87b] K. Doshi and P. Varman. A modular systolic architecture for image convolutions. *ACM SIGARCH Computer Architecture News*, 15(2):56–63, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Dvorak:1990:MAS

[Dvo90] V. Dvorak. Microsequencer architecture supporting arbitrary branching up to 2m targets. *ACM SIGARCH Computer Architecture News*, 18 (1):9, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

DeVuyst:2012:EMH

[DVT12] Matthew DeVuyst, Ashish Venkat, and Dean M. Tullsen. Execution migration in a heterogeneous-ISA chip multiprocessor. *ACM SIGARCH Computer Architecture News*, 40(1):261–272, March 2012. ASPLOS '12 conference proceedings.

Davidson:1990:RCB

[DW90] Jack W. Davidson and David B. Whalley. Reducing the cost of branches by using registers. *ACM SIGARCH Computer Architecture News*, 18(3a): 182–191, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Devietti:2012:RAS

[DWS+12] Joseph Devietti, Benjamin P. Wood, Karin Strauss, Luis Ceze, Dan Grossman, and Shaz Qadeer. RADISH: always-on sound and complete Race Detection in Software and Hardware. *ACM SIGARCH Computer Architecture News*, 40(3):201–212, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Dimitrov:2009:ABB

[DZ09] Martin Dimitrov and Huiyang Zhou. Anomaly-based bug prediction, isolation, and validation: an automated approach for software debugging. *ACM SIGARCH Computer Architecture News*, 37 (1):61–72, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Du:2013:BMB

[DZC+13] Yu Du, Miao Zhou, Bruce R. Childers, Daniel Mossé, and Rami Melhem. Bit mapping for balanced PCM cell programming. *ACM SIGARCH Computer Architecture News*, 41(3):428–439, June 2013. ICSA '13 conference proceedings.

Ding:2014:FLE

[DZZ+14] Yufei Ding, Mingzhou Zhou, Zhijia Zhao, Sarah Eisenstat, and Xipeng Shen. Finding the limit: examining the potential and complexity of compilation scheduling for JIT-based runtime systems. *ACM SIGARCH Computer Architecture News*, 42 (1):607–622, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ebcioglu:1997:DDC

[EA97] Kemal Ebcioğlu and Erik R. Altman. DAISY: dynamic compilation for 100% architectural compatibility. *ACM SIGARCH Computer Architecture News*, 25(2):26–37, May 1997. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ernst:2002:EDS

[EA02] Dan Ernst and Todd Austin. Efficient dynamic scheduling through tag elimination. *ACM SIGARCH Computer Architecture News*, 30(2):37–46, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Espasa:2002:TVE

[EAE+02] Roger Espasa, Federico Ardanaz, Joel Emer, Stephen Felix, Julio Gago, Roger Gramunt, Isaac Hernandez, Toni Juan, Geoff Lowney, Matthew Mattina, and André Seznec. Tarantula: a vector extension to the Alpha architecture. *ACM SIGARCH Computer Architecture News*, 30(2):281–292, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Elyasi:2017:EIR

[EAS+17] Nima Elyasi, Mohammad Arjomand, Anand Sivasubramaniam, Mahmut T. Kandemir, Chita R. Das, and Myoungsoo Jung. Exploiting intra-request slack to improve SSD performance. *ACM SIGARCH Computer Architecture News*, 45(1):375–388, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Eberle:2002:MDC

[Ebe02] Hans Eberle. Monitoring and diagnosing computer systems by radio communication. *ACM SIGARCH Computer Architecture News*, 30 (3):11–12, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ebrahim:1996:P

[Ebr96] Zahir Ebrahim. I/O potholes. *ACM SIGARCH Computer Architecture News*, 24 (4):19–20, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eeckhout:2004:CFM

[EBS+04] Lieven Eeckhout, Robert H. Bell Jr., Bastiaan Stougie, Koen De Bosschere, and Lizy K. John. Control flow modeling in statistical simulation for accurate and efficient processor design studies. *ACM SIGARCH Computer Architecture News*, 32 (2):350, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Esmaeilzadeh:2011:DSE

[EBS+11] Hadi Esmaeilzadeh, Emily Blem, Renee St. Amant, Karthikeyan Sankaralingam, and Doug Burger. Dark silicon and the end of multicore scaling. *ACM SIGARCH Computer Architecture News*, 39 (3):365–376, June 2011. CO-

DEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Emer:1984:CPP

[EC84] Joel S. Emer and Douglas W. Clark. A characterization of processor performance in the VAX-11/780. *ACM SIGARCH Computer Architecture News*, 12(3):301–310, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Emer:1998:CPP

[EC98a] Joel S. Emer and Douglas W. Clark. A characterization of processor performance in the VAX-11/780. In ACM [ACM98a], pages 274–283. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Emer:1998:RCP

[EC98b] Joel S. Emer and Douglas W. Clark. Retrospective: Characterization of processor performance in the VAX-11/780. In ACM [ACM98a], pages 37–38. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Evers:1996:UHB

[ECP96] Marius Evers, Po-Yung Chang, and Yale N. Patt. Using hybrid branch predictors to improve branch prediction accuracy in the presence of context switches. *ACM SIGARCH Computer Architecture News*, 24(2):3–11, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Esmaeilzadeh:2011:LBL

[ECX+11] Hadi Esmaeilzadeh, Ting Cao, Yang Xi, Stephen M. Blackburn, and Kathryn S. McKinley. Looking back on the language and hardware revolutions: measured power, performance, and scaling. *ACM SIGARCH Computer Architecture News*, 39(1):319–332, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ericsson:1983:LSM

[ED83] T. Ericsson and P. E. Danielsson. LIPP — a SIMD multiprocessor architecture for image processing. *ACM SIGARCH Computer Architecture News*, 11(3):395–400, June 1983. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ebrahimi:2017:ENT

[ED17] Masoumeh Ebrahimi and Masoud Daneshtalab. EbDa: a new theory on design and verification of deadlock-free interconnection networks. *ACM SIGARCH Computer Architecture News*, 45(2):703–715, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ewy:1993:SCP

[EE93] Benjamin J. Ewy and Joseph B. Evans. Secondary cache performance in RISC architecture. *ACM SIGARCH Computer Architecture News*, 21 (3):34–37, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eyerman:2009:PTC

[EE09] Stijn Eyerman and Lieven Eeckhout. Per-thread cycle accounting in SMT processors. *ACM SIGARCH Computer Architecture News*, 37 (1):133–144, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Eyerman:2010:MCS

[EE10a] Stijn Eyerman and Lieven Eeckhout. Modeling critical sections in Amdahl's Law and its implications for multicore design. *ACM SIGARCH Computer Architecture News*, 38(3):362–370, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eyerman:2010:PJS

[EE10b] Stijn Eyerman and Lieven Eeckhout. Probabilistic job symbiosis modeling for SMT processor scheduling. *ACM SIGARCH Computer Architecture News*, 38(1):91–102, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eyerman:2014:BSM

[EE14] Stijn Eyerman and Lieven Eeckhout. The benefit of SMT in the multi-core era: flexibility towards degrees of thread-level parallelism. *ACM SIGARCH Computer Architecture News*, 42(1):591–606, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Eyerman:2006:PCA

[EEKS06] Stijn Eyerman, Lieven Eeckhout, Tejas Karkhanis, and James E. Smith. A performance counter architecture for computing accurate CPI components. *ACM SIGARCH Computer Architecture News*, 34(5):175–184, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Emer:1997:LDP

[EG97] Joel Emer and Nikolas Gloy. A language for describing predictors and its application to automatic synthesis. *ACM SIGARCH Computer Architecture News*, 25(2):304–314, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Egan:1982:EVC

[Ega82] Rod Egan. The effect of VLSI on computer architecture. *ACM SIGARCH Computer Architecture News*, 10 (5):19–22, September 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Edler:1985:IRM

[EGK+85] Jan Edler, Allan Gottlieb, Clyde P. Kruskal, Kevin P. McAuliffe, Larry Rudolph, Marc Snir, Patricia J. Teller, and James Wilson. Issues related to MIMD shared-memory computers: the NYU Ultracomputer approach. *ACM SIGARCH Computer Architecture News*, 13(3):126–135, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

El-Halabi:1982:SRD

[EHA82] Hossam El-Halabi and Dharma P. Agrawal. Some remarks on direct execution computers. *ACM SIGARCH Computer Architecture News*, 10(1):23–27, January 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ernst:2003:CBF

[EHA03] Dan Ernst, Andrew Hamel, and Todd Austin. Cyclone: a broadcast-free dynamic instruction scheduler with selective replay. *ACM SIGARCH Computer Architecture News*, 31(2):253–263, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1989:MPC

[eHLL89] K. e H. Lee and C. H. Lam. Massage-passing controller for a shared-memory multiprocessor. *ACM SIGARCH Computer Architecture News*, 17 (6):142–149, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eijkhout:1990:IPP

[Eij90] Victor Eijkhout. Implementation of 5-point/9-point multi-level methods on hypercube architectures. *ACM SIGARCH Computer Architecture News*, 18(3b):291–295, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eickemeyer:1996:EMU

[EJK+96] Richard J. Eickemeyer, Ross E. Johnson, Steven R. Kunkel, Mark S. Squillante, and Shi-afun Liu. Evaluation of multithreaded uniprocessors for commercial application environments. *ACM SIGARCH Computer Architecture News*, 24(2):203–212, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eggers:1988:CSP

[EK88] S. J. Eggers and R. H. Katz. A characterization of sharing in parallel programs and its application to coherency protocol evaluation. *ACM SIGARCH Computer Architecture News*, 16(2):373–382, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eggers:1989:ESC

[EK89a] S. J. Eggers and R. H. Katz. The effect of sharing on the cache and bus performance of parallel programs. *ACM SIGARCH Computer Architecture News*, 17(2):257–270, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eggers:1989:EPF

[EK89b] S. J. Eggers and R. H. Katz. Evaluating the performance of four snooping cache coherency protocols. *ACM SIGARCH Computer Architecture News*, 17(3):2–15, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

El-Kharashi:2001:ATA

[EKEL01] M. Watheq El-Kharashi, Fayez Elguibaly, and Kin F. Li. Adapting Tomasulo's algorithm for bytecode folding based Java processors. *ACM SIGARCH Computer Architecture News*, 29(5):1–8, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ekanayake:2004:ULP

[EKM04] Virantha Ekanayake, Clinton Kelly IV, and Rajit Manohar. An ultra low-power processor for sensor networks. *ACM SIGARCH Computer Architecture News*, 32(5):27–36, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Edwards:1980:MGN

[EKW80] D. B. G. Edwards, A. E. Knowles, and J. V. Woods. MU6-G: a new design to achieve mainframe performance from a mini-sized computer. *ACM SIGARCH Computer Architecture News*, 8 (3):161–167, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ebrahimi:2010:FST

[ELMP10] Eiman Ebrahimi, Chang Joo Lee, Onur Mutlu, and Yale N. Patt. Fairness via source throttling: a configurable and high-performance fairness substrate for multi-core memory systems. *ACM SIGARCH Computer Architecture News*, 38(1):335–346, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ebrahimi:2011:PAS

[ELMP11] Eiman Ebrahimi, Chang Joo Lee, Onur Mutlu, and Yale N. Patt. Prefetch-aware shared resource management for multi-core systems. *ACM SIGARCH Computer Architecture News*, 39(3):141–152, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Elkateeb:1989:PSR

[ELN89] A. Elkateeb and T. Le-Ngoc. A priority strategy on RISC for real-time multitasking software applications. *ACM SIGARCH Computer Architecture News*, 17(4):62–68, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Emma:2006:ESR

[Emm06] Philip Emma. The end of scaling? revolutions in technology and microarchitecture as we pass the 90 nanometer node. *ACM SIGARCH Computer Architecture News*, 34(2):128, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hajj:2016:SPM

[EMZ+16] Izzat El Hajj, Alexander Merritt, Gerd Zellweger, Dejan Milojicic, Reto Achermann, Paolo Faraboschi, Wen mei Hwu, Timothy Roscoe, and Karsten Schwan. SpaceJMP: Programming with multiple virtual address spaces. *ACM SIGARCH Computer Architecture News*, 44(2):353–368, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Eberle:1998:SQC

[EO98] Hans Eberle and Erwin Oertli. Switcherland: a QoS communication architecture for workstation clusters. *ACM SIGARCH Computer Architecture News*, 26(3):98–108, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ebeling:1984:DIV

[EP84] Carl Ebeling and Andrew Palay. The design and implementation of a VLSI chess move generator. *ACM SIGARCH Computer Architecture News*, 12(3):74–80, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eickemeyer:1987:PEM

[EP87] R. J. Eickemeyer and J. H. Patel. Performance evaluation of multiple register sets. *ACM SIGARCH Computer Architecture News*, 15(2):264–271,

1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eickenmeyer:1988:PEC

[EP88] R. J. Eickenmeyer and J. H. Patel. Performance evaluation of on-chip register and cache organizations. *ACM SIGARCH Computer Architecture News*, 16(2):64–72, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Evers:1998:ACP

[EPCP98] Marius Evers, Sanjay J. Patel, Robert S. Chappell, and Yale N. Patt. An analysis of correlation and predictability: what makes two-level branch predictors work. *ACM SIGARCH Computer Architecture News*, 26(3):52–61, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Esponda:1992:GCR

[ER92] Margarita Esponda and Raúl Rojas. A graphical comparison of RISC processors. *ACM SIGARCH Computer Architecture News*, 20(4):2–8, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

ElMasri:1978:MIR

[ERT78] A. El Masri, J. Rohmer, and D. Tusera. A machine for information retrieval. *ACM SIGARCH Computer Architecture News*, 7(2):117–120, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eastman:1974:CDC

[ES74] Jeffrey F. Eastman and John Staudhammer. Computer display of colored three-dimensional objects. *ACM SIGARCH Computer Architecture News*, 3(4):23–27, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ekman:2005:RMM

[ES05] Magnus Ekman and Per Stenström. A robust main-memory compression scheme. *ACM SIGARCH Computer Architecture News*, 33(2):74–85, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Esmaeilzadeh:2012:ASD

[ESCB12] Hadi Esmaeilzadeh, Adrian Sampson, Luis Ceze, and Doug Burger. Architecture support for disciplined approximate programming. *ACM SIGARCH Computer Architecture News*, 40(1):301–312, March 2012. ASPLOS '12 conference proceedings.

Ezhilchelvan:1989:CRS

[EST89] P. D. Ezhilchelvan, S. K. Shrivastava, and A. Tully. Constructing replicated systems using processors with point-to-point communication links.

ACM SIGARCH Computer Architecture News, 17(3):177–184, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Estrin:2002:KAS

[Est02] Deborah Estrin. Keynote address: Sensor network research: emerging challenges for architecture, systems, and languages. *ACM SIGARCH Computer Architecture News*, 30(5):1–4, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Eslami:2016:IOM

[EW16] Fatemeh Eslami and Steven J. E. Wilton. An improved overlay and mapping algorithm supporting rapid triggering for FPGA debug. *ACM SIGARCH Computer Architecture News*, 44(4):20–25, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ekman:2005:DLC

[EWN05] Magnus Ekman, Fredrik Warg, and Jim Nilsson. An in-depth look at computer performance growth. *ACM SIGARCH Computer Architecture News*, 33(1):144–147, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Felten:1996:EEM

[FAB+96] Edward W. Felten, Richard D. Alpert, Angelos Bilas, Matthias A. Blumrich, Douglas W. Clark, Stefanos N. Damianakis, Cezary Dubnicki, Liviu Iftode, and Kai Li. Early experience with message-passing on the SHRIMP multicomputer. *ACM SIGARCH Computer Architecture News*, 24(2):296–307, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fuchs:1983:CED

[FAH83] W. Kent Fuchs, Jacob A. Abraham, and Kuang-Hua Huang. Concurrent error detection in VLSI interconnection networks. *ACM SIGARCH Computer Architecture News*, 11(3):309–315, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ferdman:2012:CCS

[FAK+12] Michael Ferdman, Almutaz Adileh, Onur Kocberber, Stavros Volos, Mohammad Alisafaee, Djordje Jevdjic, Cansu Kaynak, Adrian Daniel Popescu, Anastasia Ailamaki, and Babak Falsafi. Clearing the clouds: a study of emerging scale-out workloads on modern hardware. *ACM SIGARCH Computer Architecture News*, 40(1):37–48, March 2012. ASPLOS '12 conference proceedings.

Faroughi:2005:PPP

[Far05] Nikrouz Faroughi. Profiling of parallel processing programs on shared memory multiprocessors using Simics. *ACM SIGARCH Computer Architecture News*, 33(5):51–56, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farrens:1989:IPS

[FaRP89] M. K. Farrens and a. R. Pleszkun. Improving performance of small on-chip instruction caches. *ACM SIGARCH Computer Architecture News*, 17(3):234–241, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fatoohi:1990:VPA

[Fat90] Rod A. Fatoohi. Vector performance analysis of the NEC SX-2. *ACM SIGARCH Computer Architecture News*, 18(3b):389–400, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Faxen:2008:WWS

[Fax08] Karl-Filip Faxén. Wool — a work stealing library. *ACM SIGARCH Computer Architecture News*, 36(5):93–100, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fiol:1983:LDI

[FAY83] M. A. Fiol, I. Alegre, and J. L. A. Yebra. Line digraph iterations and the (d,k) problem for directed graphs. *ACM SIGARCH Computer Architecture News*, 11(3):174–177, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fujita:1987:TMA

[FAYA87] S. Fujita, R. Aibara, M. Yamashita, and T. Ae. A template matching algorithm using optically-connected 3-D VLSI architecture. *ACM SIGARCH Computer Architecture News*, 15(2):64–70, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fernandes:1992:EBB

[FB92] Edil S. T. Fernandes and Fernando M. B. Barbosa. Effects of building blocks on the performance of superscalar architecture. *ACM SIGARCH Computer Architecture News*, 20(2):36–45, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fang:2008:SDA

[FB08] Huan Fang and Mats Brorsson. Scalable directory architecture for distributed shared memory chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 36(5):56–64, December 2008. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Faraboschi:2000:LTP

[FBF+00] Paolo Faraboschi, Geoffrey Brown, Joseph A. Fisher, Giuseppe Desoli, and Fred Homewood. Lx: a technology platform for customizable VLIW embedded processing. *ACM SIGARCH Computer Architecture News*, 28(2):203–213, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feiner:2012:CKI

[FBG12] Peter Feiner, Angela Demke Brown, and Ashvin Goel. Comprehensive kernel instrumentation via dynamic binary translation. *ACM SIGARCH Computer Architecture News*, 40(1):135–146, March 2012. ASPLOS '12 conference proceedings.

Fields:2002:SMP

[FBH02] Brian Fields, Rastislav Bodík, and Mark D. Hill. Slack: maximizing performance under technological constraints. *ACM SIGARCH Computer Architecture News*, 30(2):47–58, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farkas:1997:MSD

[FCJV97] Keith I. Farkas, Paul Chow, Norman P. Jouppi, and Zvonko Vranesic. Memory-system design considerations for dynamically-scheduled processors. *ACM SIGARCH Computer Architecture News*, 25(2):133–143, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fineberg:1992:SLT

[FCP92] Samuel A. Fineberg, Thomas L. Casavant, and Brent H. Pease. Seamless — a latency-tolerant RISC-based multiprocessor architecture (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):432, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fagin:1987:PSP

[FD87] B. S. Fagin and A. M. Despain. Performance studies of a parallel Prolog architecture. *ACM SIGARCH Computer Architecture News*, 15 (2):108–116, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fiske:1988:RAP

[FD88] S. Fiske and W. J. Dally. The reconfigurable arithmetic processor. *ACM SIGARCH Computer Architecture News*, 16 (2):30–36, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fenwick:1984:AOA

[Fen84] P. M. Fenwick. Addressing operations for automatic data structure accessing. *ACM*

SIGARCH Computer Architecture News, 12(1):44–57, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fradj:2005:EAM

[FeOBA05] Hanene Ben Fradj, Asmaa el Ouardighi, Cécile Belleudy, and Michel Auguin. Energy aware memory architecture configuration. *ACM SIGARCH Computer Architecture News*, 33(3):3–9, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ferguson:1988:BRL

[Fer88] F. Joel Ferguson. Book review: *Logic Design Principles* by Edward J. McCluskey, Prentice-Hall Publishers, Englewood Cliffs, New Jersey, 549 pp., $39.95. *ACM SIGARCH Computer Architecture News*, 16(1): 109, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ferrucci:2011:IWD

[Fer11] David A. Ferrucci. IBM's Watson/DeepQA. *ACM SIGARCH Computer Architecture News*, 39(3):??, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Feustel:1976:TAS

[Feu76] E. A. Feustel. Tagged architecture and the semantics of programming languages: Extensible types. *ACM SIGARCH Computer Architecture News*, 4(4):147–150, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feustel:1982:PPC

[Feu82] Edward A. Feustel. Protected procedure call on the PRIME(TM) machines. *ACM SIGARCH Computer Architecture News*, 10(1):9–22, January 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feustel:1984:PEP

[Feu84] Edward A. Feustel. Process exchange on the PR1ME family of computers. *ACM SIGARCH Computer Architecture News*, 12(1):32–43, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fischler:1973:FTM

[FF73] M. A. Fischler and O. Firschein. A fault tolerant multiprocessor architecture for real-time control applications. *ACM SIGARCH Computer Architecture News*, 2(4):151–157, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fernandez:2000:EPN

[FFdDH00] Benjamín Sahelices Fernández, Diego R. Llanos Ferraris, and Agustín de Dios Hernández.

Exploiting parallelism in a network of workstations using COMA-BC. *ACM SIGARCH Computer Architecture News*, 28(3):1–8, June 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fitzpatrick:1982:RAV

[FFK+82] Daniel T. Fitzpatrick, John K. Foderaro, Manolis G. H. Katevenis, Howard A. Landman, David A. Patterson, James B. Peek, Zvi Peshkess, Carlo H. Séquin, Robert W. Sherburne, and Korbin S. Van Dyke. A RISCy approach to VLSI. *ACM SIGARCH Computer Architecture News*, 10(1):28–32, January 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fousek:2011:AFC

[FFM11] Jan Fousek, Jiři Filipovič, and Matuš Madzin. Automatic fusions of CUDA–GPU kernels for parallel map. *ACM SIGARCH Computer Architecture News*, 39(4):98–99, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Federovsky:1998:BPB

[FFW98] Eitan Federovsky, Meir Feder, and Sholomo Weiss. Branch prediction based on universal data compression algorithms. *ACM SIGARCH Computer Architecture News*, 26(3):62–72, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

French:1983:TDF

[FG83] Elaine French and Hugh Glaser. TUKI: a data flow processor. *ACM SIGARCH Computer Architecture News*, 11(1):12–18, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Freudenthal:1991:PCF

[FG91] Eric Freudenthal and Allan Gottlieb. Process coordination with fetch-and-increment. *ACM SIGARCH Computer Architecture News*, 19(2):260–268, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Folegnani:2001:EEI

[FG01] Daniele Folegnani and Antonio González. Energy-effective issue logic. *ACM SIGARCH Computer Architecture News*, 29(2):230–239, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feng:2010:SPS

[FGAM10] Shuguang Feng, Shantanu Gupta, Amin Ansari, and Scott Mahlke. Shoestring: probabilistic soft error reliability on the cheap. *ACM SIGARCH Computer Architecture News*, 38(1):385–396, March 2010. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Foutris:2013:DMA

[FGVG13] Nikos Foutris, Dimitris Gizopoulos, Xavier Vera, and Antonio Gonzalez. Deconfigurable microprocessor architectures for silicon debug acceleration. *ACM SIGARCH Computer Architecture News*, 41(3):631–642, June 2013. ICSA '13 conference proceedings.

Ford:1976:HSI

[FH76] W. S. Ford and V. C. Hamacher. Hardware support for inter-process communication and processor sharing. *ACM SIGARCH Computer Architecture News*, 4(4):113–118, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fusaoka:1982:CCH

[FH82] Akira Fusaoka and Masaharu Hirayama. Compiler chip: a hardware implementation of compiler. *ACM SIGARCH Computer Architecture News*, 10(2):92–95, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Finkel:1988:YSM

[FH88] Raphael Finkel and Debra Hengsen. YACKOS on a shared-memory multiprocessor. *ACM SIGARCH Computer Architecture News*, 16 (4):31–36, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fritsch:1989:DSM

[FHH+89] G. Fritsch, W. Henning, H. Hesenuer, R. Klar, C. U. Linster, C. w. Oehlrich, P. Schlenk, and J. Vokert. Distributed shared memory multiprocessor architecture MEMSY for high performance parallel computations. *ACM SIGARCH Computer Architecture News*, 17(6):22–35, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fu:2011:ATM

[FHM+11] Binzhang Fu, Yinhe Han, Jun Ma, Huawei Li, and Xiaowei Li. An abacus turn model for time/space-efficient reconfigurable routing. *ACM SIGARCH Computer Architecture News*, 39 (3):259–270, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Fineberg:1993:INA

[Fin93] Samuel A. Fineberg. Implementing the NHT-1 application I/O benchmark. *ACM SIGARCH Computer Architecture News*, 21(5):23–30, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1983:VLI

[Fis83] Joseph A. Fisher. Very Long Instruction Word architectures and the ELI-512. *ACM SIGARCH Computer Architecture News*, 11(3):140–150, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1984:DMS

[Fis84] Allan L. Fisher. Dictionary machines with a small number of processors. *ACM SIGARCH Computer Architecture News*, 12(3):151–156, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1986:SLA

[Fis86] A. L. Fisher. Scan line array processors for image computation. *ACM SIGARCH Computer Architecture News*, 14(2):338–345, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1998:RVL

[Fis98a] Joseph A. Fisher. Retrospective: Very long instruction word architectures and the ELI-512. In ACM [ACM98a], pages 34–36. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Fisher:1998:VLI

[Fis98b] Joseph A. Fisher. Very long instruction word architectures and the ELI-512. In ACM [ACM98a], pages 263–273. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Farkas:1994:CPT

[FJ94] K. I. Farkas and N. P. Jouppi. Complexity/performance tradeoffs with non-blocking loads. *ACM SIGARCH Computer Architecture News*, 22(2):211–222, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feo:1985:DDR

[FJB85] John Feo, Roy Jenevein, and J. C. Browne. Dynamic, distributed resource configuration on SW-banyans. *ACM SIGARCH Computer Architecture News*, 13(3):268–275, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Foster:1980:DSP

[FK80] M. J. Foster and H. T. Kung. Design of special-purpose VLSI chips: Example and opinions. *ACM SIGARCH Computer Architecture News*, 8(3):300–307, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1983:SLV

[FK83] Allan L. Fisher and H. T. Kung. Synchronizing large VLSI processor arrays. *ACM SIGARCH Computer Architecture News*, 11(3):54–58, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fu:2017:FRR

[FK17] Binzhang Fu and John Kim. Footprint: Regulating routing adaptiveness in networks-on-chip. *ACM SIGARCH Computer Architecture News*, 45 (2):691–702, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Farhad:2011:OAM

[FKBS11] Sardar M. Farhad, Yousun Ko, Bernd Burgstaller, and Bernhard Scholz. Orchestration by approximation: mapping stream programs onto multicore architectures. *ACM SIGARCH Computer Architecture News*, 39(1):357–368, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Friedman:2006:DCR

[FKC+06] Scott Friedman, Praveen Krishnamurthy, Roger Chamberlain, Ron K. Cytron, and Jason E. Fritts. Dusty caches for reference counting garbage collection. *ACM SIGARCH Computer Architecture News*, 34(1):3–10, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Flautner:2002:DCS

[FKM+02] Krisztián Flautner, Nam Sung Kim, Steve Martin, David Blaauw, and Trevor Mudge. Drowsy caches: simple techniques for reducing leakage power. *ACM SIGARCH Computer Architecture News*, 30(2):148–157, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fisher:1983:APP

[FKMD83] Allan L. Fisher, H. T. Kung, Louis M. Monier, and Yasunori Dohi. Architecture of the PSC—a programmable systolic chip. *ACM SIGARCH Computer Architecture News*, 11(3):48–53, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fukazawa:1989:RRP

[FKT+89] T. Fukazawa, T. Kimura, M. Tomizawa, K. Takeda, and Y. Itoh. R256: a research parallel processor for scientific computation. *ACM SIGARCH Computer Architecture News*, 17(3):344–351, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fournier:1976:SDG

[FL76] Serge Fournier and Ming T. Liu. System design of a grammar-programmable high-level language machine. *ACM SIGARCH Computer Architecture News*, 4(4):122.4, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fuller:1976:IMS

[FM76] S. H. Fuller and G. A. Mathew. Implementing microprogram storage with PLA's. *ACM SIGARCH Computer Architecture News*, 5(2):6–11, June 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fortes:1984:DBL

[FM84] J. A. B. Fortes and D. I. Moldovan. Data broadcasting in linearly scheduled array processors. *ACM SIGARCH Computer Architecture News*, 12(3):224–231, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ferri:2007:HSF

[FMB+07] Cesare Ferri, Tali Moreshet, R. Iris Bahar, Luca Benini, and Maurice Herlihy. A hardware/software framework for supporting transactional memory in a MPSoC environment. *ACM SIGARCH Computer Architecture News*, 35(1):47–54, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fong:2003:CAA

[Fon03] Anthony S. Fong. A computer architecture with access control and cache option tags on individual instruction operands. *ACM SIGARCH Computer Architecture News*, 31(3):1–5, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Forsell:1994:MMPa

[For94a] Martti J. Forsell. Are multiport memories physically feasible? *ACM SIGARCH Computer Architecture News*, 22(4):47–54, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Forsell:1994:MMPb

[For94b] Martti J. Forsell. Are multiport memories physically feasible? *ACM SIGARCH Computer Architecture News*, 22(5):3–10, December 1994. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Foster:1972:RDM

[Fos72a] Caxton C. Foster. A review of dynamic memories with enhanced data access by Harold S. Stone. IEEETC Vol. C-21, #4, p 359–386, April 1972. *ACM SIGARCH Computer Architecture News*, 1(2): 3–7, April 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Foster:1972:SNI

[Fos72b] Caxton C. Foster. Something new: the Intel MCS-4 micro computer set. *ACM SIGARCH Computer Architecture News*, 1(2):16–17, April 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Foster:1973:CA

[Fos73] Caxton Foster. Computer architecture. *ACM SIGARCH Computer Architecture News*, 2(1):13–18, January 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Foster:1974:S

[Fos74] Caxton C. Foster. SOCRATES. *ACM SIGARCH Computer Architecture News*, 3(4):165–169, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fostel:1993:BRC

[Fos93a] Gary Fostel. Book review: *Computer Architecture* by Mario De Blasi (Addison-Wesley Publishing Company, 1990). *ACM SIGARCH Computer Architecture News*, 21 (3):51–53, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fostel:1993:BRP

[Fos93b] Gary Fostel. Book reviews: *Principles of Computer Systems* by Gerald M. Karam & John C. Bryant (Prentice Hall 1992). *ACM SIGARCH Computer Architecture News*, 21 (3):50–51, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farrens:1991:DBR

[FP91a] Matthew Farrens and Arvin Park. Dynamic base register caching: a technique for reducing address bus width. *ACM SIGARCH Computer Architecture News*, 19(3):128–137, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farrens:1991:SAI

[FP91b] Matthew K. Farrens and Andrew R. Pleszkun. Strategies for achieving improved processor throughput. *ACM SIGARCH Computer Architecture News*, 19(3):362–369, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fu:1991:DPM

[FP91c] John W. C. Fu and Janak H. Patel. Data prefetching in multiprocessor vector cache memories. *ACM SIGARCH Computer Architecture News*, 19(3):54–63, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fromm:1997:EEI

[FPC+97] Richard Fromm, Stylianos Perissakis, Neal Cardwell, Christoforos Kozyrakis, Bruce McGaughy, David Patterson, Tom Anderson, and Katherine Yelick. The energy efficiency of IRAM architectures. *ACM SIGARCH Computer Architecture News*, 25(2):327–337, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farrens:1992:PTL

[FPF+92] Matthew Farrens, Arvin Park, Rob Fanfelle, Pius Ng, and Gary Tyson. A partitioned translation lookaside buffer approach to reducing address bandwidth (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):435, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Flynn:1972:CAJ

[FR72] Michael J. Flynn and Mrs. Carol Rogers. Computer architecture at Johns Hopkins. *ACM SIGARCH Computer Architecture News*, 1(2):21–33, April 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Frietman:1987:EOD

[FR87] E. E. E. Frietman and A. B. Ruighaver. An electro-optic data communication system for the Delft parallel processor. *ACM SIGARCH Computer Architecture News*, 15(6):2–8, December 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Feitelson:1989:AMU

[FR89] Dror G. Feitelson and Larry Rudolph. Architecture for a multi-user general-purpose parallel system. *ACM SIGARCH Computer Architecture News*, 17(6):50–56, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Franchi:1976:DFC

[Fra76] Paolo Franchi. Distribution of functions and control in RPCNET. *ACM SIGARCH Computer Architecture News*, 4(4):130–135, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Frailey:1983:WLC

[Fra83] Dennis J. Frailey. Word length of a computer architecture definitions and applications. *ACM SIGARCH Computer Architecture News*, 11 (2):20–26, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Frank:1986:EPS

[Fra86] E. H. Frank. Exploiting parallelism in a switch-level simulation machine. *ACM SIGARCH Computer Architecture News*, 14(2):209–215, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Frazier:1990:ASM

[Fra90] Gary Frazier. Ariel: a scalable multiprocessor for the simulation of neural networks. *ACM SIGARCH Computer Architecture News*, 18 (1):107, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fields:2001:FPP

[FRB01] Brian Fields, Shai Rubin, and Rastislav Bodík. Focusing processor policies via critical-path prediction. *ACM SIGARCH Computer Architecture News*, 29(2):74–85, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Freeman:1974:ICE

[Fre74] Martin Freeman. An instruction class for an extensible interpreter. *ACM SIGARCH Computer Architecture News*, 3(4):195–200, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Freeman:1987:APM

[Fre87] M. Freeman. An architectural perspective on a memory access controller. *ACM SIGARCH Computer Architecture News*, 15(2):214–223, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fletcher:2015:FON

[FRK+15] Christopher W. Fletcher, Ling Ren, Albert Kwon, Marten van Dijk, and Srinivas Devadas. Freecursive ORAM: [nearly] free recursion and integrity verification for position-based oblivious RAM. *ACM SIGARCH Computer Architecture News*, 43 (1):103–116, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Fahs:2005:CO

[FRPL05] Brian Fahs, Todd Rafacz, Sanjay J. Patel, and Steven S. Lumetta. Continuous optimization. *ACM SIGARCH Computer Architecture News*, 33(2):86–97, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Franklin:1992:ESW

[FS92] Manoj Franklin and Gurindar S. Sohi. The expandable split window paradigm for exploiting fine-grain parallelism. *ACM SIGARCH Computer Architecture News*, 20(2):58–67, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fritsch:1990:PBA

[FSA90] C. Fritsch, T. Sánchez, and J. Anaya. Primitive based architectures. *ACM SIGARCH Computer Architecture News*, 18(1):73, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fernandez:1976:ASS

[FSC76] Eduardo B. Fernandez, Rita C. Summers, and Charles D. Coleman. Architectural support for system protection (recent results). *ACM SIGARCH Computer Architecture News*, 4(4):121.2, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Falcon:2004:PCH

[FSR+04] Ayose Falcon, Jared Stark, Alex Ramirez, Konrad Lai, and Mateo Valero. Prophet/critic hybrid branch prediction. *ACM SIGARCH Computer Architecture News*, 32(2):250, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fuller:1973:CMA

[FSS73] S. H. Fuller, D. P. Siewiorek, and R. J. Swan. Computer modules: an architecture for large digital modules. *ACM SIGARCH Computer Architecture News*, 2(4):231–237, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fuller:1976:DMM

[FSS76] S. H. Fuller, D. P. Siewiorek, and R. J. Swan. The design of a multi-micro-computer system. *ACM SIGARCH Computer Architecture News*, 4(4):123, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Firoozshahian:2009:MSD

[FSS+09] Amin Firoozshahian, Alex Solomatnikov, Ofer Shacham, Zain Asgar, Stephen Richardson, Christos Kozyrakis, and Mark Horowitz. A memory system design framework: creating smart memories. *ACM SIGARCH Computer Architecture News*, 37(3):406–417, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fujimoto:1988:DPS

[FTG88] R. M. Fujimoto, J.-J. Tsai, and G. Gopalakrishnan. Design and performance of special purpose hardware for time warp. *ACM SIGARCH Computer Architecture News*, 16(2):401–409, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Flautner:1999:HLS

[FTM99] Krisztián Flautner, Gary S. Tyson, and Trevor Mudge. A high level simulator integrated with the Mirv compiler. *ACM SIGARCH Computer Architecture News*, 27(1):43–46, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Farrens:1994:SSC

[FTP94] M. Farrens, G. Tyson, and A. R. Pleszkun. A study of single-chip processor/cache organizations for large numbers of transistors. *ACM SIGARCH Computer Architecture News*, 22(2):338–347, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fujimoto:1991:VTM

[Fuj91] Richard M. Fujimoto. The Virtual Time Machine. *ACM SIGARCH Computer Architecture News*, 19(1):35–44, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fuller:1976:PPC

[Ful76] Samuel H. Fuller. Price/performance comparison of C.mmp and the PDP-10. *ACM SIGARCH Computer Architecture News*, 4(4):195–202, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fulcher:1991:BRN

[Ful91a] John Fulcher. Book review: *Neural Net Applications and Products* by Richard K. Miller, Terri C. Walker, and Anne M. Ryan (SEAl Technical Publications, 1990). *ACM SIGARCH Computer Architecture News*, 19(1):157–158, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fulcher:1991:BRM

[Ful91b] John Fulcher. Book review: *The 68000 and 68020 Microprocessors: Hardware, Software and Interfacing Techniques* by W. Triebel and A. Singh (Prentice Hall, 1991). *ACM SIGARCH Computer Architecture News*, 19(5):29–30, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fulcher:1993:BRP

[Ful93] John Fulcher. Book review: *Practical Parallel Computing* by Paul Messina and Almerico Murli, Editors (John Wiley and Sons, 1992). *ACM SIGARCH Computer Architecture News*, 21(3):53–54, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Flautner:2000:TLP

[FURM00] Kristián Flautner, Rich Uhlig, Steve Reinhardt, and Trevor Mudge. Thread-level parallelism and interactive performance of desktop applications. *ACM SIGARCH Computer Architecture News*, 28 (5):129–138, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fussell:1982:FTW

[FV82] Donald Fussell and Peter Varman. Fault-tolerant wafer-scale architectures for VLSI. *ACM SIGARCH Computer Architecture News*, 10(3):190–198, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Franklin:1982:ACC

[FW82] Mark A. Franklin and Donald F. Wann. Asynchronous and clocked control structures for VLSI based interconnection networks. *ACM SIGARCH Computer Architecture News*, 10(3):50–59, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Falsafi:1997:RND

[FW97] Babak Falsafi and David A. Wood. Reactive NUMA: a design for unifying S-COMA and CC-NUMA. *ACM SIGARCH Computer Architecture News*, 25(2):229–240, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Fan:2007:PPW

[FWB07] Xiaobo Fan, Wolf-Dietrich Weber, and Luiz Andre Barroso. Power provisioning for a warehouse-sized computer. *ACM SIGARCH Computer Architecture News*, 35 (2):13–23, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ferraiuolo:2017:VPH

[FXZ+17] Andrew Ferraiuolo, Rui Xu, Danfeng Zhang, Andrew C. Myers, and G. Edward Suh. Verification of a practical hardware security architecture through static information flow analysis. *ACM SIGARCH Computer Architecture News*, 45(1):555–568, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Fan:2016:CSG

[FZL16] Songchun Fan, Seyed Majid Zahedi, and Benjamin C. Lee. The computational sprinting game. *ACM SIGARCH Computer Architecture News*, 44 (2):561–575, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gibson:1979:TOR

[GA79] Randall Gibson and Paul Anderson. Technical overview of the Renaissance Octobus system. *ACM SIGARCH Computer Architecture News*, 7(8): 2–9, June 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gschwind:2001:OPE

[GA01] Michael Gschwind and Erik Altman. Optimization and precise exceptions in dynamic compilation. *ACM SIGARCH Computer Architecture News*, 29(1):66–74, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gunawi:2005:DCS

[GAAD+05] Haryadi S. Gunawi, Nitin Agrawal, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau, and Jiri Schindler. Deconstructing commodity storage clusters. *ACM SIGARCH Computer Architecture News*, 33(2):60–71, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gehringer:1988:SCP

[GAG88] Edward Gehringer, Janne Abullarade, and Michael H. Gulyn. A survey of commercial parallel processors. *ACM SIGARCH Computer Architecture News*, 16(4):75–107, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gordon:2012:EBM

[GAH+12] Abel Gordon, Nadav Amit, Nadav Har'El, Muli Ben-Yehuda, Alex Landau, Assaf Schuster, and Dan Tsafrir. ELI: bare-metal performance for I/O virtualization. *ACM SIGARCH Computer Architecture News*, 40(1):411–422, March 2012. ASPLOS '12 conference proceedings.

Gaillat:1983:DPP

[Gai83] Gérard Gaillat. The design of a parallel processor for image processing on-board satellites: an application oriented approach. *ACM SIGARCH Computer Architecture News*, 11(3):379–386, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Galloway:1980:AIR

[Gal80] John R. Galloway, Jr. Architectural innovation round: round #3. *ACM SIGARCH Computer Architecture News*, 8(4):8–10, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gao:1993:CRT

[Gao93] Q. S. Gao. The Chinese remainder theorem and the prime memory system. *ACM SIGARCH Computer Architecture News*, 21(2):337–340, May 1993. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gandhi:2005:SLS

[GAR+05] Amit Gandhi, Haitham Akkary, Ravi Rajwar, Srikanth T. Srinivasan, and Konrad Lai. Scalable load and store processing in latency tolerant processors. *ACM SIGARCH Computer Architecture News*, 33(2):446–457, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gass:1988:WRS

[Gas88] Wanda Gass. Workshop report: synthesis of foo bars. *ACM SIGARCH Computer Architecture News*, 16(1):104–108, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gaur:2016:BVC

[GAS16] Jayesh Gaur, Alaa R. Alameldeen, and Sreenivas Subramoney. Base-victim compression: an opportunistic cache compression architecture. *ACM SIGARCH Computer Architecture News*, 44(3):317–328, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gaudiot:1985:MHS

[Gau85] J. L. Gaudiot. Methods for handling structures in dataflow systems. *ACM SIGARCH Computer Architecture News*, 13(3):352–358, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giloi:1974:SCC

[GB74] W. K. Giloi and H. Berg. STARLET: a computer concept based on ordered sets as primitive data types. *ACM SIGARCH Computer Architecture News*, 3(4):201–206, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giloi:1983:HFD

[GB83] W. K. Giloi and P. Behr. Hierarchical function distribution — a design principle for advanced multicomputer architectures. *ACM SIGARCH Computer Architecture News*, 11(3):318–325, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghosal:1987:AMA

[GB87] D. Ghosal and L. N. Bhuyan. Analytical modeling and architectural modifications of a dataflow computer. *ACM SIGARCH Computer Architecture News*, 15(2):81–89, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goldstein:2001:NSC

[GB01] Seth Copen Goldstein and Mihai Budiu. NanoFabrics: spatial computing using molecular electronics. *ACM SIGARCH Computer Architecture News*, 29(2):178–191, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gandhi:2014:BTI

[GBHS14] Jayneel Gandhi, Arkaprava Basu, Mark D. Hill, and Michael M. Swift. BadgerTrap: a tool to instrument x86-64 TLB misses. *ACM SIGARCH Computer Architecture News*, 42(2):20–23, May 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goiri:2015:ABA

[GBNN15] Inigo Goiri, Ricardo Bianchini, Santosh Nagarakatte, and Thu D. Nguyen. ApproxHadoop: Bringing approximations to MapReduce frameworks. *ACM SIGARCH Computer Architecture News*, 43 (1):383–397, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gehringer:1986:FOO

[GC86] E. F. Gehringer and R. P. Colwell. Fast object-oriented procedure calls: lessons from the Intel 432. *ACM SIGARCH Computer Architecture News*, 14(2):92–101, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Georgescu:2011:GAC

[GC11] Serban Georgescu and Peter Chow. GPU accelerated CAE using open solvers and the cloud. *ACM SIGARCH Computer Architecture News*, 39(4):14–19, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goodman:1984:USC

[GcC84] James R. Goodman and Men chow Chiang. The use of static column RAM as a memory hierarchy. *ACM SIGARCH Computer Architecture News*, 12(3):167–173, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gutierrez:2014:ISS

[GCG+14] Anthony Gutierrez, Michael Cieslak, Bharan Giridhar, Ronald G. Dreslinski, Luis Ceze, and Trevor Mudge. Integrated 3D-stacked server designs for increasing physical density of key-value stores. *ACM SIGARCH Computer Architecture News*, 42(1):485–498, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ge:2017:GGC

[GCJ17] Xinyang Ge, Weidong Cui, and Trent Jaeger. GRIFFIN: Guarding control flows using Intel processor trace.

ACM SIGARCH Computer Architecture News, 45(1):585–598, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Grino:1985:ASM

[GCLM85] José M. Llabería Griñó, Mateo Valero Cortés, Enrique Herrada Lillo, and Jesús Labarta Mancho. Analysis and simulation of multiplexed single-bus networks with and without buffering. *ACM SIGARCH Computer Architecture News*, 13(3):414–421, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gelado:2010:ADS

[GCN+10] Isaac Gelado, Javier Cabezas, Nacho Navarro, John E. Stone, Sanjay Patel, and Wen mei W. Hwu. An asymmetric distributed shared memory model for heterogeneous parallel systems. *ACM SIGARCH Computer Architecture News*, 38(1):347–358, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gonzalez:2004:CAI

[GCO+04] Gonzalez Gonzalez, Adrian Cristal, Daniel Ortega, Alexander Veidenbaum, and Mateo Valero. A content aware integer register file organization. *ACM SIGARCH Computer Architecture News*, 32 (2):314, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gaur:2011:BIA

[GCS11] Jayesh Gaur, Mainak Chaudhuri, and Sreenivas Subramoney. Bypass and insertion algorithms for exclusive last-level caches. *ACM SIGARCH Computer Architecture News*, 39(3):81–92, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gummaraju:2008:SPG

[GCTR08] Jayanth Gummaraju, Joel Coburn, Yoshio Turner, and Mendel Rosenblum. Streamware: programming general-purpose multicore processors using streams. *ACM SIGARCH Computer Architecture News*, 36(1):297–307, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grafe:1989:EDP

[GDHH89] V. G. Grafe, G. S. Davidson, J. E. Hoch, and V. P. Holmes. The Epsilon dataflow processor. *ACM SIGARCH Computer Architecture News*, 17 (3):36–45, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gao:2016:DLP

[GDN+16] Mingyu Gao, Christina Delimitrou, Dimin Niu, Krishna T. Malladi, Hongzhong Zheng, Bob Brennan, and Christos Kozyrakis. DRAF: a low-power DRAM-based reconfigurable acceleration fabric. *ACM SIGARCH Computer Architecture News*, 44 (3):506–518, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gehlhaar:2014:NPN

[Geh14] Jeff Gehlhaar. Neuromorphic processing: a new frontier in scaling computer architecture. *ACM SIGARCH Computer Architecture News*, 42 (1):317–318, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gerrity:1980:HDU

[Ger80] G. W. Gerrity. Hardware detection of undefined references. *ACM SIGARCH Computer Architecture News*, 8(2): 8–11, April 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gerrity:1981:PI

[Ger81] G. W. Gerrity. On processes and interrupts. *ACM SIGARCH Computer Architecture News*, 9(4):4–14, June 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gupta:1986:PAA

[GFNW86] A. Gupta, C. Forgy, A. Newell, and R. Wedig. Parallel algorithms and architectures for rule-based systems. *ACM SIGARCH Computer Architecture News*, 14(2):28–37, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guo:2015:PGA

[GFT+15] Liucheng Guo, Andreea Ingrid Funie, David B. Thomas, Haohuan Fu, and Wayne Luk. Parallel genetic algorithms on multiple FPGAs. *ACM SIGARCH Computer Architecture News*, 43(4):86–93, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gniady:1999:SIR

[GFV99] Chris Gniady, Babak Falsafi, and T. N. Vijaykumar. Is SC + ILP = RC? *ACM SIGARCH Computer Architecture News*, 27(2):162–171, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gharachorloo:1991:PEM

[GGH91] Kourosh Gharachorloo, Anoop Gupta, and John Hennessy. Performance evaluation of memory consistency models for shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 19(2):245–257, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gharachorloo:1992:HML

[GGH92] Kourosh Gharachorloo, Anoop Gupta, and John Hennessy. Hiding memory latency using dynamic scheduling in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 20 (2):22–33, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gottlieb:1982:NUD

[GGK+82] Allan Gottlieb, Ralph Grishman, Clyde P. Kruskal, Kevin P. McAuliffe, Larry Rudolph, and Marc Snir. The NYU Ultracomputer—designing a MIMD, shared-memory parallel machine (extended abstract). *ACM SIGARCH Computer Architecture News*, 10(3):27–42, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gottlieb:1998:NUD

[GGK+98] Allan Gottlieb, Ralph Grishman, Clyde P. Kruskal, Kevin P. McAuliffe, Larry Rudolph, and Marc Snir. The NYU Ultracomputer — designing a MIMD, shared-memory parallel machine. In ACM [ACM98a], pages 239–254. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Guo:2013:ADA

[GGP+13] Qing Guo, Xiaochen Guo, Ravi Patel, Engin Ipek, and Eby G. Friedman. AC-DIMM: associative computing with STT-MRAM. *ACM SIGARCH Computer Architecture News*, 41(3):189–200, June 2013. ICSA '13 conference proceedings.

Gornish:1990:CDD

[GGV90] Edward H. Gornish, Elana D. Granston, and Alexander V. Veidenbaum. Compiler-directed data prefetching in multiprocessors with memory hierarchies. *ACM SIGARCH Computer Architecture News*, 18(3b):354–368, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gladney:1976:MRT

[GH76] H. M. Gladney and G. Hochweller. Multiprogramming for real-time applications. *ACM SIGARCH Computer Architecture News*, 4(4):79–85, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1986:URV

[GH86] J. R. Goodman and W. C. Hsu. On the use of registers vs. cache to minimize memory traffic. *ACM SIGARCH Computer Architecture News*, 14(2):375–383, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghosh:1988:CIM

[GH88] J. Ghosh and K. Hwang. Critical issues in mapping neural networks on message-passing multicomputers. *ACM SIGARCH Computer Architecture News*, 16(2):3–11, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Glew:1990:SCT

[GH90] Andy Glew and Wen-Mei Hwu. Snoopy cache test-and-test-and-set without excessive bus contention. *ACM SIGARCH Computer Architecture News*, 18(2):25–32, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gharachorloo:1998:RMC

[Gha98] Kourosh Gharachorloo. Retrospective: Memory consistency and event ordering in scalable shared-memory multiprocessors. In ACM [ACM98a], pages 67–70. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Gupta:1991:CEL

[GHG+91] Anoop Gupta, John Hennessy, Kourosh Gharachorloo, Todd Mowry, and Wolf-Dietrich Weber. Comparative evaluation of latency reducing and tolerating techniques. *ACM SIGARCH Computer Architecture News*, 19(3):254–263, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grot:2011:KNH

[GHKM11] Boris Grot, Joel Hestness, Stephen W. Keckler, and Onur Mutlu. Kilo-NOC: a heterogeneous network-on-chip architecture for scalability and service guarantees. *ACM SIGARCH Computer Architecture News*, 39 (3):401–412, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gibson:1989:FCT

[GHKP89] G. A. Gibson, L. Hellerstein, R. M. Karp, and D. A. Patterson. Failure correction techniques for large disk arrays. *ACM SIGARCH Computer Architecture News*, 17(2):123–132, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gandhi:2016:APE

[GHS16] Jayneel Gandhi, Mark D. Hill, and Michael M. Swift. Agile paging: exceeding the best of nested and shadow paging. *ACM SIGARCH Computer Architecture News*, 44 (3):707–718, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gao:1990:TEF

[GHW90] Guang R. Gao, Herbert H. J. Hum, and Yue-Bong Wong. Towards efficient fine-grain software pipelining. *ACM SIGARCH Computer Architecture News*, 18(3b):369–379, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gilmore:1980:SEM

[Gil80] John Gilmore. Suggested enhancements to the Motorola MC68000. *ACM SIGARCH Computer Architecture News*, 8(7):8–14, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giloi:1983:TTC

[Gil83] W. K. Giloi. Towards a taxonomy of computer architecture based on the machine data type view. *ACM SIGARCH Computer Architecture News*, 11(3):6–15, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guo:2010:RCA

[GIS10] Xiaochen Guo, Engin Ipek, and Tolga Soyata. Resistive computation: avoiding the power wall with low-leakage, STT-MRAM based computing. *ACM SIGARCH Computer Architecture News*, 38(3):371–382, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gebhart:2011:EEM

[GJT+11] Mark Gebhart, Daniel R. Johnson, David Tarjan, Stephen W. Keckler, William J. Dally, Erik Lindholm, and Kevin Skadron. Energy-efficient mechanisms for managing thread context in throughput processors. *ACM SIGARCH Computer Architecture News*, 39(3):235–246, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gavish:1978:EAD

[GK78] Bezalel Gavish and Harvey Koch. An extensible architecture for data flow processing. *ACM SIGARCH Computer Architecture News*, 7(2): 71–76, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gottlieb:1981:CPP

[GK81] Allan Gottlieb and Clyde P. Kruskal. Coordinating parallel processors: a partial unification. *ACM SIGARCH Computer Architecture News*, 9(6): 16–24, October 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gehringer:1985:TAH

[GK85] Edward F. Gehringer and J. Leslie Keedy. Tagged architecture: how compelling are its advantages? *ACM SIGARCH Computer Architecture News*, 13(3):162–170, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grossman:2013:HSF

[GKB+13] J. P. Grossman, Jeffrey S. Kuskin, Joseph A. Bank, Michael Theobald, Ron O. Dror, Douglas J. Ierardi, Richard H. Larson, U. Ben Schafer, Brian Towles, Cliff Young, and David E. Shaw. Hardware support for fine-grained event-driven computation in Anton 2. *ACM SIGARCH Computer Architecture News*, 41(1):549–560, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gajski:1984:PPR

[GKF84] Daniel Gajski, Won Kim, and Shinya Fushimi. A parallel pipelined relational query processor: an architectural overview. *ACM SIGARCH Computer Architecture News*, 12(3):134–141, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goiri:2013:PGM

[GKL+13] Íñigo Goiri, William Katsak, Kien Le, Thu D. Nguyen, and Ricardo Bianchini. Parasol and GreenSwitch: managing datacenters powered by renewable energy. *ACM SIGARCH Computer Architecture News*, 41(1):51–64, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gajski:1983:CLS

[GKLS83] Daniel Gajski, David Kuck, Duncan Lawrie, and Ahmed Sameh. CEDAR: a large scale multiprocessor. *ACM SIGARCH Computer Architecture News*, 11(1):7–11, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grunwald:1998:CES

[GKMP98] Dirk Grunwald, Artur Klauser, Srilatha Manne, and Andrew Pleszkun. Confidence estimation for speculation control. *ACM SIGARCH Computer Architecture News*, 26(3):122–131, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grosspietsch:1980:CTR

[GKN80] K. E. Grosspietsch, J. Kaiser, and E. Nett. A concept for test and reconfiguration of a fault-tolerant VLSI processor system. *ACM SIGARCH Computer Architecture News*, 8(3):37–43, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gibson:2000:FVS

[GKO+00] Jeff Gibson, Robert Kunz, David Ofelt, Mark Horowitz, John Hennessy, and Mark Heinrich. FLASH vs. (Simulated) FLASH: closing the simulation loop. *ACM SIGARCH Computer Architecture News*, 28(5):49–58, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giuffrida:2013:SAL

[GKT13] Cristiano Giuffrida, Anton Kuijsten, and Andrew S. Tanenbaum. Safe and automatic live update for operating systems. *ACM SIGARCH Computer Architecture News*, 41(1):279–292, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gupta:2009:DFT

[GKU09] Aayush Gupta, Youngjae Kim, and Bhuvan Urgaonkar. DFTL: a flash translation layer employing demand-based selective caching of page-level address mappings. *ACM SIGARCH Computer Architecture News*, 37(1):229–240, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Guo:2007:CQC

[GKZ+07] Fei Guo, Hari Kannan, Li Zhao, Ramesh Illikkal, Ravi Iyer, Don Newell, Yan Solihin, and Christos Kozyrakis. From chaos to QoS: case studies in CMP resource management. *ACM SIGARCH Computer Architecture News*, 35(1):21–30, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goke:1973:BNP

[GL73] L. Rodney Goke and G. J. Lipovski. Banyan networks for partitioning multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 2(4):21–28, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goke:1998:BNP

[GL98a] L. Rodney Goke and G. J. Lipovski. Banyan networks for partitioning multiprocessor systems. In ACM [ACM98a], pages 117–124. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number

PR08491; IEEE Order Plan Catalog Number 98CB36235.

Golla:1998:CEB

[GL98b] Prasad N. Golla and Eric C. Lin. A comparison of the effect of branch prediction on multithreaded and scalar architectures. *ACM SIGARCH Computer Architecture News*, 26(4):3–11, September 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gross:1998:RRW

[GL98c] Thomas Gross and Monica Lam. Retrospective: a retrospective on the Warp machines. In ACM [ACM98a], pages 45–47. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Gunadi:2011:CCR

[GL11] Erika Gunadi and Mikko H. Lipasti. CRIB: consolidated rename, issue, and bypass. *ACM SIGARCH Computer Architecture News*, 39 (3):23–32, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gaudiot:1988:SPD

[GLH88] J. L. Gaudiot, C. M. Lin, and M. Hosseiniyar. Solving partial differential equations in a data-driven multiprocessor environment. *ACM SIGARCH Computer Architecture News*, 16(2):223–230, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gharachorloo:1990:MCE

[GLL+90] Kourosh Gharachorloo, Daniel Lenoski, James Laudon, Phillip Gibbons, Anoop Gupta, and John Hennessy. Memory consistency and event ordering in scalable shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 18(3a):15–26, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gharachorloo:1998:MCE

[GLL+98] Kourosh Gharachorloo, Daniel Lenoski, James Laudon, Phillip Gibbons, Anoop Gupta, and John Hennessy. Memory consistency and event ordering in scalable shared-memory multiprocessors. In ACM [ACM98a], pages 376–387. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order

Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Ghose:2013:IMS

[GLM13] Saugata Ghose, Hyodong Lee, and José F. Martínez. Improving memory scheduling via processor-side load criticality information. *ACM SIGARCH Computer Architecture News*, 41(3):84–95, June 2013. ICSA '13 conference proceedings.

Guo:2013:CPE

[GLVC13] Ce Guo, Wayne Luk, Ekaterina Vinkovskaya, and Rama Cont. Customisable pipelined engine for intensity evaluation in multivariate Hawkes point processes. *ACM SIGARCH Computer Architecture News*, 41(5):59–64, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goble:1982:DPV

[GM82] George H. Goble and Michael H. Marsh. A dual processor VAX 11/780. *ACM SIGARCH Computer Architecture News*, 10(3):291–298, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghaffar:1984:SEC

[GM84] Khaled Abdel Ghaffar and Robert J. McEliece. Soft error correction for increased densities in VLSI memories. *ACM SIGARCH Computer Architecture News*, 12(3):248–250, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ginosar:1990:PAP

[GM90] Ran Ginosar and Nick Michell. On the potential of asynchronous pipelined processors. *ACM SIGARCH Computer Architecture News*, 18(4):27–34, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gabbay:1998:EIF

[GM98] Freddy Gabbay and Avi Mendelson. The effect of instruction fetch bandwidth on value prediction. *ACM SIGARCH Computer Architecture News*, 26(3):272–281, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gebhart:2009:ETC

[GMC+09] Mark Gebhart, Bertrand A. Maher, Katherine E. Coons, Jeff Diamond, Paul Gratz, Mario Marino, Nitya Ranganathan, Behnam Robatmili, Aaron Smith, James Burrill, Stephen W. Keckler, Doug Burger, and Kathryn S. McKinley. An evaluation of the TRIPS computer system. *ACM SIGARCH Computer Architecture News*, 37 (1):1–12, March 2009. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Greathouse:2011:DDS

[GMF+11] Joseph L. Greathouse, Zhiqiang Ma, Matthew I. Frank, Ramesh Peri, and Todd Austin. Demand-driven software race detection using hardware performance counters. *ACM SIGARCH Computer Architecture News*, 39 (3):165–176, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goto:1989:DPC

[GMT89] A. Goto, A. Matsumoto, and E. Tick. Design and performance of a coherent cache for parallel logic programming architectures. *ACM SIGARCH Computer Architecture News*, 17(3):25–33, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gangwani:2016:CBS

[GMT16] Tanmay Gangwani, Adam Morrison, and Josep Torrellas. CASPAR: Breaking serialization in lock-free multicore synchronization. *ACM SIGARCH Computer Architecture News*, 44(2):789–804, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gunther:1989:PBS

[GN89] N. J. Gunther and M. T. Noga. ParcBench: a benchmark for shared-memory architectures. *ACM SIGARCH Computer Architecture News*, 17(4):54–61, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Glass:1992:TMA

[GN92] Christopher J. Glass and Lionel M. Ni. The turn model for adaptive routing. *ACM SIGARCH Computer Architecture News*, 20(2):278–287, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Glass:1998:TMA

[GN98] Christopher J. Glass and Lionel M. Ni. The turn model for adaptive routing. In ACM [ACM98a], pages 441–450. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Goiri:2015:CTV

[GNB15] Íñigo Goiri, Thu D. Nguyen, and Ricardo Bianchini. CoolAir: Temperature- and variation-aware management for freecooled datacenters. *ACM SIGARCH Computer Architecture News*, 43(1):253–265, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Godard:2013:MSS

[God13] Ivan Godard. The Mill: split-stream encoding. *ACM SIGARCH Computer Architecture News*, 41(5):1–5, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gohringer:2014:RMS

[Göh14] Diana Göhringer. Reconfigurable multiprocessor systems: Handling Hydras heads — a survey. *ACM SIGARCH Computer Architecture News*, 42(4):39–44, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goldwasser:1984:GOD

[Gol84] Samuel M. Goldwasser. A generalized object display processor architecture. *ACM SIGARCH Computer Architecture News*, 12(3):38–47, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gonzalez:1977:BRR

[Gon77] Mario J. Gonzalez. Book review: Review of *Microprogramming Primer* by Harry Katzan, Jr., McGraw-Hill 1977. *ACM SIGARCH Computer Architecture News*, 6(1):29–30, June 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1983:UCM

[Goo83] James R. Goodman. Using cache memory to reduce processor-memory traffic. *ACM SIGARCH Computer Architecture News*, 11 (3):124–131, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1987:CMV

[Goo87] James R. Goodman. Coherency for multiprocessor virtual address caches. *ACM SIGARCH Computer Architecture News*, 15(5):72–81, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Good:1988:SIC

[Goo88a] Philip L. Good. Structuring an instruction cache. *ACM SIGARCH Computer Architecture News*, 16(3):40–43, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1988:RDR

[Goo88b] James R. Goodman. Reply to David R. Cheriton's, Pat Boyle's, and Gert A. Slavenburg's "Comments on 'Coherency for multiprocessor virtual addressed caches" ' by James R. Goodman. *ACM SIGARCH Computer Architecture News*, 16(3):7, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1998:RUC

[Goo98a] James R. Goodman. Retrospective: Using cache memory to reduce processor-memory traffic. In ACM [ACM98a], pages 32–33. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Goodman:1998:UCM

[Goo98b] James R. Goodman. Using cache memory to reduce processor-memory traffic. In ACM [ACM98a], pages 255–262. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Gorsline:1983:RAC

[Gor83] G. W. Gorsline. Review of *Advances in Computer Architecture* by Glenford J. Myers, John Wiley & Sons, Inc. 1982. *ACM SIGARCH Computer Architecture News*, 11 (1):55, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gottlieb:1998:RPR

[Got98] Allan Gottlieb. Retrospective: a personal retrospective on the NYU ultracomputer. In ACM [ACM98a], pages 29–31. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Gouda:1978:HCC

[Gou78] Mohamed G. Gouda. A hierarchical controller for concurrent accessing of distributed databases. *ACM SIGARCH Computer Architecture News*, 7(2):65–70, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gove:2007:CWS

[Gov07] Darryl Gove. CPU2006 working set size. *ACM SIGARCH*

Computer Architecture News, 35(1):90–96, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gault:1976:DUP

[GP76] James W. Gault and Alice C. Parker. The design of a user-programmable digital interface (recent results). *ACM SIGARCH Computer Architecture News*, 4(4):121.3, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Garth:1988:ISN

[GP88] Simon Garth and Danny Pike. An integrated system for neural network simulations. *ACM SIGARCH Computer Architecture News*, 16(1):37–44, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gschwind:1995:VP

[GP95] Michael K. Gschwind and Thomas J. Pietsch. Vector prefetching. *ACM SIGARCH Computer Architecture News*, 23(5):1–7, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gidenstam:2008:LLF

[GP08] Anders Gidenstam and Marina Papatriantafilou. LFTHREADS: a lock-free thread library. *ACM SIGARCH Computer Architecture News*, 36(5):88–92, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giefers:2013:AFD

[GPF13] Heiner Giefers, Christian Plessl, and Jens Förstner. Accelerating finite difference time domain simulations with reconfigurable dataflow computers. *ACM SIGARCH Computer Architecture News*, 41(5):65–70, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gomez:2002:ASA

[GPPT02] I. Gòmez, L. Piñuel, M. Prieto, and F. Tirado. Analysis of simulation-adapted SPEC 2000 benchmarks. *ACM SIGARCH Computer Architecture News*, 30(4):4–10, September 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Georgiou:1987:ECI

[GPR87] C. J. Georgiou, S. L. Palmer, and P. L. Rosenfeld. An experimental coprocessor for implementing persistent objects on an IBM 4381. *ACM SIGARCH Computer Architecture News*, 15(5):84–87, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gomaa:2004:HRL

[GPV04] Mohamed Gomaa, Michael D. Powell, and T. N. Vijaykumar. Heat-and-run: leveraging SMT and CMP to manage power density through the operating system. *ACM SIGARCH Computer Architecture News*, 32(5):260–270, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gao:2017:TSE

[GPY+17] Mingyu Gao, Jing Pu, Xuan Yang, Mark Horowitz, and Christos Kozyrakis. TETRIS: Scalable and efficient neural network acceleration with 3D memory. *ACM SIGARCH Computer Architecture News*, 45(1):751–764, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Graham:1984:PAS

[Gra84] Peter C. J. Graham. Providing architectural support for expert systems. *ACM SIGARCH Computer Architecture News*, 12(5):12–18, December 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grabienski:1991:FFS

[Gra91] Peter Grabienski. FLIP-FLOP: a stack-oriented multiprocessing system. *ACM SIGARCH Computer Architecture News*, 19(1):120–127, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ganapathy:2008:DIM

[GRB+08] Vinod Ganapathy, Matthew J. Renzelmann, Arini Balakrishnan, Michael M. Swift, and Somesh Jha. The design and implementation of microdrivers. *ACM SIGARCH Computer Architecture News*, 36(1):168–178, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guha:1987:AID

[GRD87] A. Guha, R. Ramnarayan, and M. Derstine. Architectural issues in designing symbolic processors in optics. *ACM SIGARCH Computer Architecture News*, 15(2):145–151, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Garg:2006:SMD

[GRH06] Alok Garg, M. Wasiur Rashid, and Michael Huang. Slackened memory dependence enforcement: Combining opportunistic forwarding with decoupled verification. *ACM SIGARCH Computer Architecture News*, 34(2):142–154, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Griffin:1988:UUR

[Gri88] Glenn W. Griffin. The ultimate ultimate RISC. *ACM*

SIGARCH Computer Architecture News, 16(5):26–32, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gonzalez-Rubio:1984:SFP

[GRRT84] R. Gonzalez-Rubio, J. Rohmer, and D. Terral. The SCHUSS filter: a processor for non-numerical data processing. *ACM SIGARCH Computer Architecture News*, 12(3):64–73, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goldstein:1974:MOR

[GS74] Barry C. Goldstein and Thomas W. Scrutchin. A machine-oriented resource management architecture. *ACM SIGARCH Computer Architecture News*, 3(4):214–219, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guillier:1980:ACF

[GS80] P. Guillier and D. Slosberg. An architecture with comprehensive facilities of inter-process synchronization and communication. *ACM SIGARCH Computer Architecture News*, 8(3):264–270, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grahn:1995:ESS

[GS95] Håkan Grahn and Per Stenström. Efficient strategies for software-only protocols in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 23 (2):38–47, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gove:2007:ECB

[GS07] Darryl Gove and Lawrence Spracklen. Evaluating the correspondence between training and reference workloads in SPEC CPU2006. *ACM SIGARCH Computer Architecture News*, 35(1):122–129, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Giri:2012:FIN

[GS12] Nishant Kumar Giri and Amitabha Sinha. FPGA implementation of a novel architecture for performance enhancement of radix-2 FFT. *ACM SIGARCH Computer Architecture News*, 40(2): 28–32, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Guo:2016:HDI

[GSCM16] Qing Guo, Karin Strauss, Luis Ceze, and Henrique S. Malvar. High-density image storage using approximate memory cells. *ACM SIGARCH Computer Architecture News*, 44(2):413–426, May 2016. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Gurumurthi:2003:DDS

[GSKF03] Sudhanva Gurumurthi, Anand Sivasubramaniam, Mahmut Kandemir, and Hubertus Franke. DRPM: dynamic speed control for power management in server class disks. *ACM SIGARCH Computer Architecture News*, 31(2):169–181, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gope:2017:ASS

[GSL17] Dibakar Gope, David J. Schlais, and Mikko H. Lipasti. Architectural support for server-side PHP processing. *ACM SIGARCH Computer Architecture News*, 45 (2):507–520, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Goldstein:1999:PCP

[GSM+99] Seth Copen Goldstein, Herman Schmit, Matthew Moe, Mihai Budiu, Srihari Cadambi, R. Reed Taylor, and Ronald Laufer. PipeRench: a co/processor for streaming multimedia acceleration. *ACM SIGARCH Computer Architecture News*, 27(2):28–39, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gontmakher:2006:ILG

[GSM06] Alex Gontmakher, Assaf Schuster, and Avi Mendelson. Inthreads: a low granularity parallelization model. *ACM SIGARCH Computer Architecture News*, 34(1):77–80, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gurumurthi:2005:DDR

[GSN05] Sudhanva Gurumurthi, Anand Sivasubramaniam, and Vivek K. Natarajan. Disk drive roadmap from the thermal perspective: a case for dynamic thermal management. *ACM SIGARCH Computer Architecture News*, 33(2):38–49, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghandeharizadeh:1993:OTS

[GSR93] Shahram Ghandeharizadeh, Cyrus Shahabi, and Luis Ramos. An overview of techniques to support continuous retrieval of multimedia objects. *ACM SIGARCH Computer Architecture News*, 21(5):39–46, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gao:2005:AAL

[GSS05] Xiaofeng Gao, Beth Simon, and Allan Snavely. ALITER: an asynchronous lightweight instrumentation tool for event recording. *ACM SIGARCH Computer Architecture News*, 33(5):33–38, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghosh:2012:FPR

[GSS12a] Aniruddha Ghosh, Satrughna Singha, and Amitabha Sinha. "Floating point RNS": a new concept for designing the MAC unit of digital signal processor. *ACM SIGARCH Computer Architecture News*, 40 (2):39–43, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ghosh:2012:NAF

[GSS12b] Aniruddha Ghosh, Satrughna Singha, and Amitabha Sinha. A new architecture for FPGA implementation of a MAC unit for digital signal processors using mixed number system. *ACM SIGARCH Computer Architecture News*, 40 (2):33–38, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gharachorloo:2000:ADA

[GSSV00] Kourosh Gharachorloo, Madhu Sharma, Simon Steely, and Stephen Van Doren. Architecture and design of AlphaServer GS320. *ACM SIGARCH Computer Architecture News*, 28(5):13–24, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Govindan:2011:BLT

[GSU11] Sriram Govindan, Anand Sivasubramaniam, and Bhuvan Urgaonkar. Benefits and limitations of tapping into stored energy for datacenters. *ACM SIGARCH Computer Architecture News*, 39 (3):341–352, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gomaa:2003:TFR

[GSVP03] Mohamed Gomaa, Chad Scarbrough, T. N. Vijaykumar, and Irith Pomeranz. Transient-fault recovery for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 31(2):98–109, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gallivan:1990:SGS

[GSZ90] K. Gallivan, A. Sameh, and Z. Zlatev. Solving general sparse linear systems using conjugate gradient-type methods. *ACM SIGARCH Computer Architecture News*, 18(3b):132–139, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gordon:2006:ECG

[GTA06] Michael I. Gordon, William Thies, and Saman Amarasinghe. Exploiting coarse-grained task, data, and pipeline parallelism in stream programs. *ACM SIGARCH Computer Architecture News*, 34(5):151–162, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ghosal:1989:ACC

[GTBJ89] D. S. Ghosal, S. K. Tripathi, L. N. Bhuyan, and H. Jiang. Analysis of computation-communication issues in dynamic dataflow architectures. *ACM SIGARCH Computer Architecture News*, 17(3):325–333, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1985:PVD

[GtHL+85] J. R. Goodman, Jian tu Hsieh, Koujuch Liou, Andrew R. Pleszkun, P. B. Schechter, and Honesty C. Young. PIPE: a VLSI decoupled architecture. *ACM SIGARCH Computer Architecture News*, 13 (3):20–27, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gordon:2002:SCC

[GTK+02] Michael I. Gordon, William Thies, Michal Karczmarek, Jasper Lin, Ali S. Meli, Andrew A. Lamb, Chris Leger, Jeremy Wong, Henry Hoffmann, David Maze, and Saman Amarasinghe. A stream compiler for communication-exposed architectures. *ACM SIGARCH Computer Architecture News*, 30(5):291–303, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guo:2013:CAS

[GTL13] Liucheng Guo, David B. Thomas, and Wayne Luk. Customisable architectures for the set covering problem. *ACM SIGARCH Computer Architecture News*, 41(5):101–106, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gidra:2015:NGC

[GTS+15] Lokesh Gidra, Gaël Thomas, Julien Sopena, Marc Shapiro, and Nhan Nguyen. NumaGiC: a garbage collector for big data on big NUMA machines. *ACM SIGARCH Computer Architecture News*, 43 (1):661–673, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gidra:2013:SSS

[GTSS13] Lokesh Gidra, Gaël Thomas, Julien Sopena, and Marc Shapiro. A study of the scalability of stop-the-world garbage collectors on multicores. *ACM SIGARCH Computer Architecture News*, 41 (1):229–240, March 2013. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Gumpertz:1983:CTE

[Gum83] Richard H. Gumpertz. Combining tags with error codes. *ACM SIGARCH Computer Architecture News*, 11(3):160–165, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gunther:1990:HSM

[Gun90] Bernard K. Gunther. A high speed mechanism for short branches. *ACM SIGARCH Computer Architecture News*, 18(4):59–61, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gupta:1989:FBM

[Gup89] Rajiv Gupta. The fuzzy barrier: a mechanism for high speed synchronization of processors. *ACM SIGARCH Computer Architecture News*, 17(2):54–63, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gurd:1994:SBB

[Gur94] J. R. Gurd. Supercomputing: big bang or steady state growth? *ACM SIGARCH Computer Architecture News*, 22(3):3–13, June 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gutzmann:1987:ODH

[Gut87] Kurt M. Gutzmann. Optimal dimension of hypercubes for sorting. *ACM SIGARCH Computer Architecture News*, 15(1):68–72, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gomaa:2005:OTF

[GV05] Mohamed A. Gomaa and T. N. Vijaykumar. Opportunistic transient-fault detection. *ACM SIGARCH Computer Architecture News*, 33(2):172–183, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodstein:2010:BAA

[GVC+10] Michelle L. Goodstein, Evangelos Vlachos, Shimin Chen, Phillip B. Gibbons, Michael A. Kozuch, and Todd C. Mowry. Butterfly analysis: adapting dataflow analysis to dynamic parallel monitoring. *ACM SIGARCH Computer Architecture News*, 38(1):257–270, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Goodman:1989:ESP

[GVW89] James R. Goodman, Mary K. Vernon, and Philip J. Woest. Efficient synchronization primitives for large-scale cache-coherent multiprocessors. *ACM SIGARCH Computer Ar-*

chitecture News, 17(2):64–75, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gerasoulis:1990:CTG

[GVY90] Apostolos Gerasoulis, Sesh Venugopal, and Tao Yang. Clustering task graphs for message passing architectures. *ACM SIGARCH Computer Architecture News*, 18(3b): 447–456, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gentleman:1973:TC

[GW73] W. M. Gentleman and B. A. Wichmann. Timing on computers. *ACM SIGARCH Computer Architecture News*, 2(3):20–23, October 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). URL `ftp://ftp.math.utah.edu/pub/mirrors/ftp.ira.uka.de/bibliography/Misc/monitor.bib`.

Goodman:1988:WMN

[GW88] J. R. Goodman and P. J. Woest. The Wisconsin multicube: a new large-scale cache-coherent multiprocessor. *ACM SIGARCH Computer Architecture News*, 16 (2):422–431, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gibson:2010:FSC

[GW10] Dan Gibson and David A. Wood. Forwardflow: a scalable core for power-constrained CMPs. *ACM SIGARCH Computer Architecture News*, 38(3):14–25, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Grewal:2003:EAC

[GWM03] Gary Gréwal, Tom Wilson, and Andrew Morton. An EGA approach to the compile-time assignment of data to multiple memories in digital-signal processors. *ACM SIGARCH Computer Architecture News*, 31(1):49–59, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Govindan:2012:LSE

[GWSU12] Sriram Govindan, Di Wang, Anand Sivasubramaniam, and Bhuvan Urgaonkar. Leveraging stored energy for handling power emergencies in aggressively provisioned datacenters. *ACM SIGARCH Computer Architecture News*, 40(1):75–86, March 2012. ASPLOS '12 conference proceedings.

Greathouse:2012:CUW

[GXLA12] Joseph L. Greathouse, Hongyi Xin, Yixin Luo, and Todd Austin. A case for unlimited watchpoints. *ACM SIGARCH*

Computer Architecture News, 40(1):159–172, March 2012. ASPLOS '12 conference proceedings.

Gu:2016:BFN

[GYB+16] Boncheol Gu, Andre S. Yoon, Duck-Ho Bae, Insoon Jo, Jinyoung Lee, Jonghyun Yoon, Jeong-Uk Kang, Moonsang Kwon, Chanho Yoon, Sangyeun Cho, Jaeheon Jeong, and Duckhyun Chang. Biscuit: a framework for near-data processing of big data workloads. *ACM SIGARCH Computer Architecture News*, 44 (3):153–165, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Gloy:1996:ADB

[GYCS96] Nicolas Gloy, Cliff Young, J. Bradley Chen, and Michael D. Smith. An analysis of dynamic branch prediction schemes on system workloads. *ACM SIGARCH Computer Architecture News*, 24(2):12–21, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Gao:2011:TMH

[GZC+11] Qi Gao, Wenbin Zhang, Zhezhe Chen, Mai Zheng, and Feng Qin. 2ndStrike: toward manifesting hidden concurrency typestate bugs. *ACM SIGARCH Computer Architecture News*, 39(1):239–250, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Guha:2013:SEW

[GZuRC13] Apala Guha, Yao Zhang, Raihan ur Rasool, and Andrew A. Chien. Systematic evaluation of workload clustering for extremely energy-efficient architectures. *ACM SIGARCH Computer Architecture News*, 41(2):22–29, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hudak:1990:CTD

[HA90] David E. Hudak and Santosh G. Abraham. Compiler techniques for data partitioning of sequentially iterated parallel loops. *ACM SIGARCH Computer Architecture News*, 18(3b):187–200, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hughes:2004:FAF

[HA04] Christopher J. Hughes and Sarita V. Adve. A Formal Approach to Frequent Energy Adaptations for Multimedia Applications. *ACM SIGARCH Computer Architecture News*, 32(2):138, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2017:PSA

[HABZ17] Jian Huang, Michael Allen-Bond, and Xuechen Zhang. Pallas: Semantic-aware checking for finding deep bugs in fast path. *ACM SIGARCH Computer Architecture News*, 45(1):709–722, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Haikala:1984:CHRa

[Hai84a] I. J. Haikala. Cache hit ratios with geometric task switch intervals. *ACM SIGARCH Computer Architecture News*, 12(3):175, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Haikala:1984:CHRb

[Hai84b] Ilkka J. Haikala. Cache hit ratios with geometric task switch intervals. *ACM SIGARCH Computer Architecture News*, 12(3):364–371, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hake:1985:PDP

[Hak85] J.-Fr. Hake. PDOC — a database on parallel processing literature. *ACM SIGARCH Computer Architecture News*, 13(4):2–7, September 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Halstead:1987:OCM

[Hal87] Robert H. Halstead, Jr. Overview of Concert MultiLisp: a multiprocessor symbolic computing system. *ACM SIGARCH Computer Architecture News*, 15(1):5–14, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hamilton:2009:ISS

[Ham09] James Hamilton. Internet-scale service infrastructure efficiency. *ACM SIGARCH Computer Architecture News*, 37(3):232, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hansen:1978:MAC

[Han78] Per Brinch Hansen. Multiprocessor architectures for concurrent programs. *ACM SIGARCH Computer Architecture News*, 7(4):4–23, December 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hara:1996:PCI

[HANN96] Tetsuya Hara, Hideki Ando, Chikako Nakanishi, and Masao Nakaya. Performance comparison of ILP machines with cycle time evaluation. *ACM SIGARCH Computer Architecture News*, 24(2):213–224, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hari:2012:REA

[HANR12] Siva Kumar Sastry Hari, Sarita V. Adve, Helia Naeimi, and Pradeep Ramachandran. Relyzer: exploiting application-level fault equivalence to analyze application resiliency to transient faults. *ACM SIGARCH Computer Architecture News*, 40(1):123–134, March 2012. ASPLOS '12 conference proceedings.

Halstead:1986:CDM

[HAOS86] R. R. Halstead, Jr., T. L. Anderson, R. B. Osborne, and T. L. Sterling. Concert: design of a multiprocessor development system. *ACM SIGARCH Computer Architecture News*, 14(2):40–48, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hartenstein:1973:IHC

[Har73] R. Hartenstein. Increasing hardware complexity—a challenge to computer architecture education. *ACM SIGARCH Computer Architecture News*, 2(4):201–206, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hartenstein:1974:LMI

[Har74] Reiner W. Hartenstein. Letter to membership from incoming chairman (CAN, Oct. 73). *ACM SIGARCH Computer Architecture News*, 3(1):19–22, March 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harvill:1978:FPO

[Har78] J. B. Harvill. Functional parallelism in an operand state saving computer. *ACM SIGARCH Computer Architecture News*, 7(2):77–84, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harbison:1982:AAO

[Har82] Samuel P. Harbison. An architectural alternative to optimizing compilers. *ACM SIGARCH Computer Architecture News*, 10(2):57–65, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harland:1986:RMT

[Har86] David M. Harland. A recursively microcodable tagged architecture. *ACM SIGARCH Computer Architecture News*, 14(3):34–40, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harper:1991:RMC

[Har91] D. T. Harper III. Reducing memory contention in shared memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 19 (3):66–73, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hoseinzadeh:2014:RAL

[HASA14] Morteza Hoseinzadeh, Mohammad Arjomand, and Hamid Sarbazi-Azad. Reducing access latency of MLC PCMs through line striping. *ACM SIGARCH Computer Architecture News*, 42 (3):277–288, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Haynes:1977:AAC

[Hay77] Leonard S. Haynes. The architecture of an ALGOL 60 computer implemented with distributed processors. *ACM SIGARCH Computer Architecture News*, 5(7):95–104, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harland:1986:MOO

[HB86] David M. Harland and Bruno Beloff. Microcoding an object-oriented instruction set. *ACM SIGARCH Computer Architecture News*, 14(5):3–12, December 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1990:PMT

[HB90] Jiun-Ming Hsu and Prithviraj Banerjee. Performance measurement and trace driven simulation of parallel CAD and numeric applications on a hypercube multicomputer. *ACM SIGARCH Computer Architecture News*, 18(3a): 260–269, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hunt:2013:DTN

[HBCG13] Nicholas Hunt, Tom Bergan, Luis Ceze, and Steven D. Gribble. DDOS: taming nondeterminism in distributed systems. *ACM SIGARCH Computer Architecture News*, 41(1):499–508, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Heo:2002:DFG

[HBHA02] Seongmoo Heo, Kenneth Barr, Mark Hampton, and Krste Asanović. Dynamic fine-grain leakage reduction using leakage-biased bitlines. *ACM SIGARCH Computer Architecture News*, 30(2):137–147, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hong:2013:RTR

[HBII13] Chuan Hong, Khaled Benkrid, Nazrin Isa, and Xabier Iturbe. A run-time reconfigurable system for adaptive high performance efficient computing. *ACM SIGARCH Computer Architecture News*, 41(5):113–118, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hrishikesh:2002:OLD

[HBJ+02] M. S. Hrishikesh, Doug Burger, Norman P. Jouppi, Stephen W. Keckler, Keith I. Farkas, and Premkishore Shivakumar. The optimal logic depth per pipeline stage is 6 to 8 FO4 inverter delays. *ACM SIGARCH Computer Architecture News*, 30(2):14–24, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hashmi:2011:AAF

[HBTL11] Atif Hashmi, Hugues Berry, Olivier Temam, and Mikko Lipasti. Automatic abstraction and fault tolerance in cortical microachitectures. *ACM SIGARCH Computer Architecture News*, 39(3):1–10, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Horst:1985:AHV

[HC85] Robert W. Horst and Timothy C. K. Chou. An architecture for high volume transaction processing. *ACM SIGARCH Computer Architecture News*, 13(3):240–245, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1988:EPM

[HC88] W. W. Hwu and P. P. Chang. Exploiting parallel microprocessor microarchitectures with a compiler code generator. *ACM SIGARCH Computer Architecture News*, 16(2):45–53, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1989:AHI

[HC89] W. W. Hwu and P. P. Chang. Achieving high instruction cache performance with an optimizing compiler. *ACM SIGARCH Computer Architecture News*, 17(3):242–251, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwang:1999:SSI

[HC99] Seung H. Hwang and Gwan S. Choi. Selective-set-invalidation (SSI) for soft-error-resilient cache architecture. *ACM SIGARCH Computer Architecture News*, 27(3):4–9, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Heinrich:2003:OWA

[HC03] Mark Heinrich and Mainak Chaudhuri. Ocean warning: avoid drowning. *ACM SIGARCH Computer Architecture News*, 31(3):30–32, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hauswirth:2004:LOM

[HC04] Matthias Hauswirth and Trishul M. Chilimbi. Low-overhead memory leak detection using adaptive statistical profiling. *ACM SIGARCH Computer Architecture News*, 32(5):156–164, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hosek:2015:VUE

[HC15] Petr Hosek and Cristian Cadar. VARAN the unbelievable: an efficient N-version execution framework. *ACM SIGARCH Computer Architecture News*, 43(1):339–353, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Huh:2004:CDM

[HCBS04] Jaehyuk Huh, Jichuan Chang, Doug Burger, and Gurindar S. Sohi. Coherence decoupling: making use of incoherence. *ACM SIGARCH Computer Architecture News*, 32(5):97–106, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1989:CSH

[HCC89] W. W. Hwu, T. M. Conte, and P. P. Chang. Comparing software and hardware schemes for reducing the cost of branches. *ACM SIGARCH Computer Architecture News*, 17(3):224–233, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hankins:2006:MIS

[HCC+06] Richard A. Hankins, Gautham N. Chinya, Jamison D. Collins, Perry H. Wang, Ryan Rakvic, Hong Wang, and John P. Shen. Multiple instruction stream processor. *ACM SIGARCH Computer Architecture News*, 34(2):114–127, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Halstead:1994:PCR

[HCD+94] Burt Halstead, David Callahan, Jack Dennis, R. S. Nikhil, and Vivek Sarkar. Programming, compilation, and resource management issues for multithreading (panel session II). *ACM SIGARCH Computer Architecture News*, 22(1):19–33, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Heath:2006:MFT

[HCG+06] Taliver Heath, Ana Paula Centeno, Pradeep George, Luiz Ramos, and Yogesh Jaluria. Mercury and Freon: temperature emulation and management for server systems. *ACM SIGARCH Computer Architecture News*, 34 (5):106–116, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hasan:2006:CSE

[HCJC06] Jahangir Hasan, Srihari Cadambi, Venkatta Jakkula, and Srimat Chakradhar. Chisel: a storage-efficient, collision-free hash-based network processing architecture. *ACM SIGARCH Computer Architecture News*, 34(2):203–215, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hmid:2015:TAR

[HCL15] Soukaina N. Hmid, Jose G. F. Coutinho, and Wayne Luk. A transfer-aware runtime system for heterogeneous asynchronous parallel execution. *ACM SIGARCH Computer Architecture News*, 43(4):40–45, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hong:2012:GMD

[HCSO12] Sungpack Hong, Hassan Chafi, Edic Sedlar, and Kunle Olukotun. Green-Marl: a DSL for easy and efficient graph analysis. *ACM SIGARCH Computer Architecture News*, 40(1):349–362, March 2012. ASPLOS '12 conference proceedings.

Hasan:2003:EUM

[HCV03] Jahangir Hasan, Satish Chandra, and T. N. Vijaykumar. Efficient use of memory bandwidth to improve network processor throughput. *ACM SIGARCH Computer Architecture News*, 31(2):300–313, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hammond:2004:PTC

[HCW+04] Lance Hammond, Brian D. Carlstrom, Vicky Wong, Ben Hertzberg, Mike Chen, Christos Kozyrakis, and Kunle Olukotun. Programming with transactional coherence and consistency (TCC). *ACM SIGARCH Computer Architecture News*, 32(5):1–13, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hormati:2010:MMS

[HCW+10] Amir H. Hormati, Yoonseo Choi, Mark Woh, Manjunath Kudlur, Rodric Rabbah, Trevor Mudge, and Scott Mahlke. MacroSS: macro-SIMDization of streaming applications. *ACM SIGARCH Computer Architecture News*, 38(1):285–296, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hammerstrom:1977:ICC

[HD77] D. W. Hammerstrom and E. S. Davidson. Information content of CPU memory referencing behavior. *ACM SIGARCH Computer Architecture News*, 5(7):184–192, March 1977. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1986:HCS

[HD86] P. Y. T. Hsu and E. S. Davidson. Highly concurrent scalar processing. *ACM SIGARCH Computer Architecture News*, 14(2):386–395, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hofmann:2011:EOS

[HDK+11] Owen S. Hofmann, Alan M. Dunn, Sangman Kim, Indrajit Roy, and Emmett Witchel. Ensuring operating system kernel integrity with OSck. *ACM SIGARCH Computer Architecture News*, 39(1):279–290, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwang:1990:ORB

[HDP+90] K. Hwang, M. Dubois, D. K. Panda, S. Rao, S. Shang, A. Uresin, W. Mao, H. Nair, M. Lytwyn, F. Hsieh, J. Liu, S. Mehrotra, and C. M. Cheng. OMP: a RISC-based multiprocessor using orthogonal-access memories and multiple spanning buses. *ACM SIGARCH Computer Architecture News*, 18(3b):7–22, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2010:OES

[HDS10] Ruirui Huang, Daniel Y. Deng, and G. Edward Suh. Orthrus: efficient software integrity protection on multicores. *ACM SIGARCH Computer Architecture News*, 38(1):371–384, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Honarmand:2013:CUA

[HDT+13] Nima Honarmand, Nathan Dautenhahn, Josep Torrellas, Samuel T. King, Gilles Pokam, and Cristiano Pereira. Cyrus: unintrusive application-level record-replay for replay parallelism. *ACM SIGARCH Computer Architecture News*, 41(1):193–206, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Healy:1976:COC

[Hea76] Leonard D. Healy. A character-oriented context-addressed segment-sequential storage. *ACM SIGARCH Computer Architecture News*, 4(4):172–177, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Heath:1984:RER

[Hea84] J. L. Heath. Re-evaluation of the RISC I. *ACM SIGARCH Computer Architecture News*, 12(1):3–10, March 1984. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Hsieh:2016:TOM

[HEK+16] Kevin Hsieh, Eiman Ebrahimi, Gwangsun Kim, Niladrish Chatterjee, Mike O'Connor, Nandita Vijaykumar, Onur Mutlu, and Stephen W. Keckler. Transparent offloading and mapping (TOM): enabling programmer-transparent near-data processing in GPU systems. *ACM SIGARCH Computer Architecture News*, 44(3):204–216, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hennessy:1998:RED

[Hen98] John Hennessy. Retrospective: Evaluation of directory schemes for cache coherence. In ACM [ACM98a], pages 61–62. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Henning:2006:SCB

[Hen06] John L. Henning. SPEC CPU2006 benchmark descriptions. *ACM SIGARCH Computer Architecture News*, 34 (4):1–17, September 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Henning:2007:GEI

[Hen07a] John L. Henning. Guest editor's introduction. *ACM SIGARCH Computer Architecture News*, 35(1):63–64, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Henning:2007:PCD

[Hen07b] John L. Henning. Performance counters and development of SPEC CPU2006. *ACM SIGARCH Computer Architecture News*, 35(1):118–121, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Henning:2007:SCS

[Hen07c] John L. Henning. SPEC CPU suite growth: an historical perspective. *ACM SIGARCH Computer Architecture News*, 35(1):65–68, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Henning:2007:SCM

[Hen07d] John L. Henning. SPEC CPU2006 memory footprint. *ACM SIGARCH Computer Architecture News*, 35(1):84–89, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Herrod:2006:FVT

[Her06] Steve Herrod. The future of virtualization technology. *ACM SIGARCH Computer Architecture News*, 34(2):352, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hey:1990:STP

[Hey90] Anthony J. G. Hey. Supercomputing with transputers—past, present and future. *ACM SIGARCH Computer Architecture News*, 18(3b):479–489, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Halstead:1988:MMP

[HF88] R. H. Halstead, Jr. and T. Fujita. MASA: a multithreaded processor architecture for parallel symbolic computing. *ACM SIGARCH Computer Architecture News*, 16(2):443–451, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hardavellas:2009:RNN

[HFFA09] Nikos Hardavellas, Michael Ferdman, Babak Falsafi, and Anastasia Ailamaki. Reactive NUCA: near-optimal block placement and replication in distributed caches. *ACM SIGARCH Computer Architecture News*, 37(3):184–195, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Higuchi:1991:IPA

[HFH+91] Tetsuya Higuchi, Tatsumi Furuya, Kenichi Handa, Naoto Takahashi, Hiroyasu Nishiyama, and Akio Kokubu. IXM2: a parallel associative processor. *ACM SIGARCH Computer Architecture News*, 19 (3):22–31, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hoang:2011:ECT

[HFJ11] Giang Hoang, Robby Bruce Findler, and Russ Joseph. Exploring circuit timing-aware language and compilation. *ACM SIGARCH Computer Architecture News*, 39(1):345–356, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hau:2003:SJA

[HFL03] Gary K. W. Hau, Anthony Fong, and Mok Pak Lun. Support of Java API for the jHISC system. *ACM SIGARCH Computer Architecture News*, 31(4):12–17, September 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hayes:1987:ADE

[HFWZ87] John R. Hayes, Martin E. Fraeman, Robert L. Williams, and Thomas Zaremba. An architecture for the direct execution of the Forth programming language. *ACM SIGARCH Computer Architecture News*, 15(5):42–49, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hawakami:1986:SDS

[HG86] K. Hawakami and J. R. Gurd. A scalable dataflow structure store. *ACM SIGARCH Computer Architecture News*, 14(2):243–250, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hum:1988:SWF

[HG88] Herbert H. J. Hum and Guang R. Gao. Summary of the workshop on frontiers in functional programming and dataflow architecture. *ACM SIGARCH Computer Architecture News*, 16(5):12–19, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hakura:1997:DAC

[HG97] Ziyad S. Hakura and Anoop Gupta. The design and analysis of a cache architecture for texture mapping. *ACM SIGARCH Computer Architecture News*, 25(2):108–120, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Herrero:2010:ECC

[HGC10] Enric Herrero, José González, and Ramon Canal. Elastic cooperative caching: an autonomous dynamically adaptive memory hierarchy for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 38(3):419–428, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hughes:2007:PSA

[HGS+07] Christopher J. Hughes, Radek Grzeszczuk, Eftychios Sifakis, Daehyun Kim, Sanjeev Kumar, Andrew P. Selle, Jatin Chhugani, Matthew Holliman, and Yen-Kuang Chen. Physical simulation for animation and visual effects: parallelization and characterization for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 35(2):220–231, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2016:EAA

[HGS+16] Yipeng Huang, Ning Guo, Mingoo Seok, Yannis Tsividis, and Simha Sethumadhavan. Evaluation of an analog accelerator for linear algebra. *ACM SIGARCH Computer Architecture News*, 44 (3):570–582, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hines:2005:IPE

[HGTW05] Stephen Hines, Joshua Green, Gary Tyson, and David Whalley. Improving program efficiency by packing instructions into registers. *ACM SIGARCH Computer Architecture News*, 33(2):260–271, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huck:1993:AST

[HH93] Jerry Huck and Jim Hays. Architectural support for translation table management in large address space machines. *ACM SIGARCH Computer Architecture News*, 21(2):39–50, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hower:2008:REE

[HH08] Derek R. Hower and Mark D. Hill. Rerun: Exploiting episodes for lightweight memory race recording. *ACM SIGARCH Computer Architecture News*, 36(3):265–276, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hayashi:1983:AHP

[HHA83] Hiromu Hayashi, Akira Hattori, and Haruo Akimoto. ALPHA—a high-performance LISP machine equipped with a new stack structure and garbage collection system. *ACM SIGARCH Computer Architecture News*, 11(3):342–348, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hower:2014:HRF

[HHB+14] Derek R. Hower, Blake A. Hechtman, Bradford M. Beckmann, Benedict R. Gaster, Mark D. Hill, Steven K. Reinhardt, and David A. Wood. Heterogeneous-race-free memory models. *ACM SIGARCH Computer Architecture News*, 42(1):427–440, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Haque:2015:FMI

[HhEH+15] Md E. Haque, Yong hun Eom, Yuxiong He, Sameh Elnikety, Ricardo Bianchini, and Kathryn S. McKinley. Few-to-many: Incremental parallelism for reducing tail latency in interactive services. *ACM SIGARCH Computer Architecture News*, 43(1):161–175, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Horst:1990:MII

[HHJ90] Robert W. Horst, Richard L. Harris, and Robert L. Jardine. Multiple instruction issue in the NonStop Cyclone processor. *ACM SIGARCH Computer Architecture News*, 18(3a):216–226, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2016:DLN

[HHL16] Ziqiang Huang, Andrew D. Hilton, and Benjamin C. Lee. Decoupling loads for nano-instruction set computers. *ACM SIGARCH Computer Architecture News*, 44(3):406–417, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Huang:2013:NRC

[HHS13] Ruirui Huang, Erik Halberg, and G. Edward Suh. Non-race concurrency bug detection through order-sensitive critical sections. *ACM SIGARCH Computer Architecture News*, 41(3):655–666, June 2013. ICSA '13 conference proceedings.

Horie:1993:IAP

[HHSI93] Takeshi Horie, Kenichi Hayashi, Toshiyuki Shimizu, and Hiroaki Ishihata. Improving AP1000 parallel computer performance with message communication. *ACM SIGARCH Computer Architecture News*, 21(2):314–325, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hibino:1980:PPG

[Hib80] Yasushi Hibino. A practical parallel garbage collection algorithm and its implementation. *ACM SIGARCH Computer Architecture News*, 8(3):113–120, May 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). URL `ftp://ftp.math.utah.edu/pub/mirrors/ftp.ira.uka.de/bibliography/Compiler/garbage.collection.bib`.

Hicks:1976:GQS

[Hic76] D. R. Hicks. A generalized queue scheme for process synchronization and communication. *ACM SIGARCH Computer Architecture News*, 5(2):12–14, June 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hicks:1977:MCA

[Hic77a] D. R. Hicks. Microprogramming with a content-addressable read-only-memory. *ACM SIGARCH Computer Architecture News*, 6(3):14–15, August 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hicks:1977:MPS

[Hic77b] D. R. Hicks. Multitasking as a program structuring primitive. *ACM SIGARCH Computer Architecture News*, 6(3):16–18, August 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hicks:2017:CAS

[Hic17] Matthew Hicks. Clank: Architectural support for intermittent computation. *ACM SIGARCH Computer Architecture News*, 45(2):228–240, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Higbee:1990:QEC

[Hig90] Lee Higbee. Quick and easy cache performance analysis. *ACM SIGARCH Computer Architecture News*, 18 (2):33–44, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:1981:HMS

[Hil81] Dwight D. Hill. A hardware mechanism for supporting range checks. *ACM SIGARCH Computer Architecture News*, 9(4):15–21, June 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:1983:ACM

[Hil83] Dwight D. Hill. An analysis of C machine support for other block-structured languages. *ACM SIGARCH Computer Architecture News*, 11(4):6–16, September 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:1990:WS

[Hil90] Mark D. Hill. What is scalability? *ACM SIGARCH Computer Architecture News*, 18(4):18–21, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hilton:1991:BRS

[Hil91] Michael L. Hilton. Book review: *Systems Programming in Parallel Logic Languages* by Ian Foster (Prentice Hall, 1990). *ACM SIGARCH Computer Architecture News*, 19 (1):151, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:2013:RDC

[Hil13] Mark D. Hill. Research directions for 21st century computer systems: ASPLOS 2013 panel. *ACM SIGARCH Computer Architecture News*, 41 (1):459–460, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hsu:2005:ECD

[HIM+05] Lisa Hsu, Ravi Iyer, Srihari Makineni, Steve Reinhardt, and Donald Newell. Exploring the cache design space for large scale CMPs. *ACM SIGARCH Computer Architecture News*, 33(4):24–33, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hirayama:1986:VOA

[Hir86] M. Hirayama. VLSI oriented asynchronous architecture. *ACM SIGARCH Computer Architecture News*, 14(2):290–296, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huggahalli:2005:DCA

[HIT05] Ram Huggahalli, Ravi Iyer, and Scott Tetrick. Direct cache access for high bandwidth network I/O. *ACM SIGARCH Computer Architecture News*, 33(2):50–59, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harper:1986:PEV

[HJ86] D. T. Harper III and J. R. Jump. Performance evaluation of vector accesses in parallel memories using a skewed storage scheme. *ACM SIGARCH Computer Architecture News*, 14(2):324–328, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harper:1987:PER

[HJ87] D. T. Harper III and J. R. Jump. Performance evaluation of reduced bandwidth multistage interconnection networks. *ACM SIGARCH Computer Architecture News*, 15(2):171–175, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hennessy:1982:HST

[HJB+82] John Hennessy, Norman Jouppi, Forest Baskett, Thomas Gross, and John Gill. Hardware/software tradeoffs for increased performance. *ACM SIGARCH Computer Architecture News*, 10(2):2–11, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hopper:1989:MVW

[HJL89] A. Hopper, A. Jones, and D. Lioupis. Multiple vs. wide shared bus multiprocessors. *ACM SIGARCH Computer Architecture News*, 17(3):300–306, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Han:2016:IMD

[HJrCH16] Jaeung Han, Seungheun Jeon, Young ri Choi, and Jaehyuk Huh. Interference management for distributed parallel applications in consolidated clusters. *ACM SIGARCH Computer Architecture News*, 44(2):443–456, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hill:2000:RCA

[HJS00] Mark D. (Mark Donald) Hill, Norman P. (Norman Paul) Jouppi, and Gurindar Sohi, editors. *Readings in Computer Architecture*. Morgan Kaufmann Publishers, San Francisco, CA, USA, 2000. ISBN 1-55860-539-8. xviii + 717 pp. LCCN QA76.9.A73 H55 2000. URL `http://books.elsevier.com/bookscat/links/details.asp?isbn=1558605398; http://www.loc.gov/catdir/description/els033/99044480.html; http://www.loc.gov/catdir/toc/els033/99044480.`

html; https://archive.org/details/readingsincomput0000hill/page/n9/mode/2up?q=Slave+memories; https://shop.elsevier.com/books/readings-in-computer-architecture/hill/978-0-08-057364-9.

Hsiao:1977:ADC

[HK77] David K. Hsiao and Krishnamurthi Kannan. The architecture of a database computer — a summary. *ACM SIGARCH Computer Architecture News*, 6(2):31–33, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1989:AGU

[HK89a] Tsong-Chih Hsu and Ling-Yang Kung. An address generation unit for array accessing. *ACM SIGARCH Computer Architecture News*, 17 (6):154–160, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1989:HMP

[HK89b] Tsong-Chih Hsu and Ling-Yang Kung. A hardware mechanism for priority queue. *ACM SIGARCH Computer Architecture News*, 17(6):162–169, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1989:LCF

[HK89c] Tsong-Chih Hsu and Ling-Yang Kung. Logic and conflict-free vector addresses. *ACM SIGARCH Computer Architecture News*, 17(6):150–153, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1990:CFO

[HK90] Tsong-Chih Hsu and Ling-Yang Kung. A comment on “A Fetch-and-Op Implementation for Parallel Computers”. *ACM SIGARCH Computer Architecture News*, 18 (1):32, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hong:2009:AMG

[HK09] Sunpyo Hong and Hyesoon Kim. An analytical model for a GPU architecture with memory-level and thread-level parallelism awareness. *ACM SIGARCH Computer Architecture News*, 37(3):152–163, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hong:2010:IGP

[HK10] Sunpyo Hong and Hyesoon Kim. An integrated GPU power and performance model. *ACM SIGARCH Computer Architecture News*, 38(3):280–289, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hughes:2001:VEM

[HKA+01] Christopher J. Hughes, Praful Kaul, Sarita V. Adve, Rohit Jain, Chanik Park, and Jayanth Srinivasan. Variability in the execution of multimedia applications and implications for architecture. *ACM SIGARCH Computer Architecture News*, 29(2):254–265, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hofmann:2013:ISA

[HKD+13] Owen S. Hofmann, Sangman Kim, Alan M. Dunn, Michael Z. Lee, and Emmett Witchel. InkTag: secure applications on an untrusted operating system. *ACM SIGARCH Computer Architecture News*, 41(1):265–278, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hashemi:2016:ADC

[HKE+16] Milad Hashemi, Khubaib, Eiman Ebrahimi, Onur Mutlu, and Yale N. Patt. Accelerating dependent cache misses with an enhanced memory controller. *ACM SIGARCH Computer Architecture News*, 44 (3):444–455, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hercksen:1980:HMS

[HKK80] Uwe Hercksen, Rainer Klar, and Wolfgang Kleinöder. Hardware-measurements of storage access conflicts in the processor array EGPA(1). *ACM SIGARCH Computer Architecture News*, 8(3):317–324, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Henry:2000:CWW

[HKLS00] Dana S. Henry, Bradley C. Kuszmaul, Gabriel H. Loh, and Rahul Sami. Circuits for wide-window superscalar processors. *ACM SIGARCH Computer Architecture News*, 28(2):236–247, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hu:2002:TMS

[HKM02] Zhigang Hu, Stefanos Kaxiras, and Margaret Martonosi. Timekeeping in the memory system: predicting and optimizing memory behavior. *ACM SIGARCH Computer Architecture News*, 30(2):209–220, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hirata:1992:EPA

[HKN+92] Hiroaki Hirata, Kozo Kimura, Satoshi Nagamine, Yoshiyuki Mochizuki, Akio Nishimura, Yoshimori Nakase, and Teiji Nishizawa. An elementary processor architecture with simultaneous instruction issuing from multiple threads. *ACM SIGARCH Computer Architecture News*, 20(2):136–145, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hidaka:1993:MTC

[HKT93] Yasuo Hidaka, Hanpei Koike, and Hidehiko Tanaka. Multiple threads in cyclic register windows. *ACM SIGARCH Computer Architecture News*, 21(2):131–142, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huguet:1985:RRF

[HL85] Miquel Huguet and Tomás Lang. A reduced register file for RISC architectures. *ACM SIGARCH Computer Architecture News*, 13(4):22–31, September 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harper:1989:DSS

[HL89] D. T. Harper and D. A. Linebarger. A dynamic storage scheme for conflict-free vector access. *ACM SIGARCH Computer Architecture News*, 17(3):72–77, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Herbordt:2015:LLG

[HL15] Martin Herbordt and Miriam Leeser. Off-loading LET generation to PEACH2: a switching hub for high performance GPU clusters. *ACM SIGARCH Computer Architecture News*, 43(4):3–8, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hill:1993:WAR

[HLL+93] Mark D. Hill, James R. Larus, Alvin R. Lebeck, Madhusudhan Talluri, and David A. Wood. Wisconsin Architectural Research Tool Set. *ACM SIGARCH Computer Architecture News*, 21(4):8–10, September 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hansen:1982:PEI

[HLM+82] Paul M. Hansen, Mark A. Linton, Robert N. Mayo, Marguerite Murphy, and David A. Patterson. A performance evaluation of the Intel iAPX 432. *ACM SIGARCH Computer Architecture News*, 10 (4):17–26, June 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Han:2016:EEI

[HLM+16] Song Han, Xingyu Liu, Huizi Mao, Jing Pu, Ardavan Pedram, Mark A. Horowitz, and William J. Dally. EIE: efficient inference engine on compressed deep neural network. *ACM SIGARCH Computer Architecture News*, 44 (3):243–254, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Haring:1998:IWP

[HLR98] Günter Haring, Christoph Lindemann, and Martin Reiser. International workshop performance evaluation — origins and directions. *ACM SIGARCH Computer Architecture News*, 26(1):5–6, March 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Holland:2005:ADK

[HLS05] David A. Holland, Ada T. Lim, and Margo I. Seltzer. An architecture a day keeps the hacker away. *ACM SIGARCH Computer Architecture News*, 33(1):34–41, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:1994:WWT

[HLW94] Mark D. Hill, James R. Larus, and David A. Wood. The Wisconsin Wind Tunnel project: an annotated bibliography. *ACM SIGARCH Computer Architecture News*, 22(5):19–26, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hauswald:2015:SOE

[HLZ+15] Johann Hauswald, Michael A. Laurenzano, Yunqi Zhang, Cheng Li, Austin Rovinski, Arjun Khurana, Ronald G. Dreslinski, Trevor Mudge, Vinicius Petrucci, Lingjia Tang, and Jason Mars. Sirius: an open end-to-end voice and vision personal assistant and its implications for future warehouse scale computers. *ACM SIGARCH Computer Architecture News*, 43 (1):223–238, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Herlihy:1993:TMA

[HM93] Maurice Herlihy and J. Eliot B. Moss. Transactional memory: architectural support for lock-free data structures. *ACM SIGARCH Computer Architecture News*, 21(2):289–300, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harris:2005:PAS

[HM05] Laune C. Harris and Barton P. Miller. Practical analysis of stripped binary code. *ACM SIGARCH Computer Architecture News*, 33(5):63–68, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hu:2005:CCI

[HMJK05] Chunling Hu, John McCabe, Daniel A. Jiménez, and Ulrich Kremer. The Camino Compiler infrastructure. *ACM SIGARCH Computer Architecture News*, 33(5):3–8, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Horowitz:1996:IMO

[HMMS96] Mark Horowitz, Margaret Martonosi, Todd C. Mowry, and Michael D. Smith. Informing memory operations: providing memory performance feedback in modern processors. *ACM SIGARCH Computer Architecture News*, 24(2):260–270, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hammerstrom:1986:CAP

[HMT86] Dan Hammerstrom, David Maier, and Shreekant Thakkar. The Cognitive Architecture Project. *ACM SIGARCH Computer Architecture News*, 14(1):9–21, January 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsiao:2017:ASI

[HNK+17] Chun-Hung Hsiao, Satish Narayanasamy, Essam Muhammad Idris Khan, Cristiano L. Pereira, and Gilles A. Pokam. AsyncClock: Scalable inference of asynchronous event causality. *ACM SIGARCH Computer Architecture News*, 45(1):193–205, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hassaan:2015:KDG

[HNP15] Muhammad Amber Hassaan, Donald D. Nguyen, and Keshav K. Pingali. Kinetic dependence graphs. *ACM SIGARCH Computer Architecture News*, 43(1):457–471, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hurakami:1977:PPS

[HNS77] K. Hurakami, S. Nishikawa, and M. Sato. Poly-processor System analysis and design. *ACM SIGARCH Computer Architecture News*, 5(7):49–56, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hashmi:2011:CNI

[HNTL11] Atif Hashmi, Andrew Nere, James Jamal Thomas, and Mikko Lipasti. A case for neuromorphic ISAs. *ACM SIGARCH Computer Architecture News*, 39(1):145–158, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hall:1991:PCA

[HO91] C. Brian Hall and Kevin O'Brien. Performance characteristics of architectural features of the IBM RISC System/6000. *ACM SIGARCH*

Computer Architecture News, 19(2):303–309, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hoffmann:1980:HIC

[Hof80] Miguel García Hoffmann. Hardware implementation of communication protocols: a formal approach. *ACM SIGARCH Computer Architecture News*, 8(3):253–263, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hollaar:1983:BRR

[Hol83] Lee A. Hollaar. Book reviews: Review of *Computer Design* by Glen G. Langdon, Computeach Press. *ACM SIGARCH Computer Architecture News*, 11(2):27–28, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Holliday:1989:RHP

[Hol89] M. A. Holliday. Reference history, page size, and migration daemons in local/remote architectures. *ACM SIGARCH Computer Architecture News*, 17(2):104–112, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hommes:1982:HSC

[Hom82] F. Hommes. The heap/ substitution concept — an implementation of functional operations on data structures for a reduction machine. *ACM SIGARCH Computer Architecture News*, 10(3):248–256, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hoogendoorn:1977:RMI

[Hoo77] Cornelis H. Hoogendoorn. Reduction of memory interference in multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 5 (7):179–183, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1986:HHP

[HP86] W. Hwu and Y. N. Patt. HPSm, a high performance restricted data flow architecture having minimal functionality. *ACM SIGARCH Computer Architecture News*, 14(2):297–306, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1987:CRO

[HP87] W. W. Hwu and Y. N. Patt. Checkpoint repair for out-of-order execution machines. *ACM SIGARCH Computer Architecture News*, 15(2):18–26, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwu:1998:HHP

[HP98] Wen-Wei Hwu and Yale N. Patt. HPSm, a high performance restricted data flow architecture having minimal functionality. In ACM [ACM98a], pages 300–308. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Hartstein:2002:OPD

[HP02] A. Hartstein and Thomas R. Puzak. The optimum pipeline depth for a microprocessor. *ACM SIGARCH Computer Architecture News*, 30(2):7–13, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hong:1986:GAS

[HPF86] Y. C. Hong, T. H. Payne, and L. B. O. Ferguson. Graph allocation in static dataflow systems. *ACM SIGARCH Computer Architecture News*, 14 (2):55–64, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Heckey:2015:CMC

[HPJ+15] Jeff Heckey, Shruti Patil, Ali JavadiAbhari, Adam Holmes, Daniel Kudrow, Kenneth R. Brown, Diana Franklin, Frederic T. Chong, and Margaret Martonosi. Compiler management of communication and parallelism for quantum computation. *ACM SIGARCH Computer Architecture News*, 43(1):445–456, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hayes:2016:FVM

[HPU+16] Timothy Hayes, Oscar Palomar, Osman Unsal, Adrian Cristal, and Mateo Valero. Future vector microprocessor extensions for data aggregations. *ACM SIGARCH Computer Architecture News*, 44 (3):418–430, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hameed:2010:USI

[HQW+10] Rehan Hameed, Wajahat Qadeer, Megan Wachs, Omid Azizi, Alex Solomatnikov, Benjamin C. Lee, Stephen Richardson, Christos Kozyrakis, and Mark Horowitz. Understanding sources of inefficiency in general-purpose chips. *ACM SIGARCH Computer Architecture News*, 38 (3):37–47, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hutchison:1978:MM

[HR78] J. S. Hutchison and W. G. Roman. Madman machine. *ACM SIGARCH Computer Architecture News*, 7(2):85–90, August 1978. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hall:1991:VVA

[HR91] Judith S. Hall and Paul T. Robinson. Virtualizing the VAX architecture. *ACM SIGARCH Computer Architecture News*, 19(3):380–389, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hallnor:2000:FAS

[HR00] Erik G. Hallnor and Steven K. Reinhardt. A fully associative software-managed cache design. *ACM SIGARCH Computer Architecture News*, 28(2):107–116, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hilton:2007:GCI

[HR07] Andrew D. Hilton and Amir Roth. Ginger: control independence using tag rewriting. *ACM SIGARCH Computer Architecture News*, 35(2):436–447, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hilton:2009:DSC

[HR09] Andrew Hilton and Amir Roth. Decoupled store completion/silent deterministic replay: enabling scalable data memory for CPR/CFP processors. *ACM SIGARCH Computer Architecture News*, 37(3):245–254, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Houstis:1990:ENS

[HRC+90] E. N. Houstis, J. R. Rice, N. P. Chrisochoides, H. C. Karathanasis, P. N. Papachiou, M. K. Samartzis, E. A. Vavalis, Ko Yang Wang, and S. Weerawarana. //ELLPACK: a numerical simulation programming environment for parallel MIMD machines. *ACM SIGARCH Computer Architecture News*, 18 (3b):96–107, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1985:TST

[HRDA85] Peter Y. T. Hsu, Joseph T. Rahmeh, Edward S. Davidson, and Jacob A. Abraham. TIDBITS: speedup via time-delay bit-slicing in ALU design for VLSI technology. *ACM SIGARCH Computer Architecture News*, 13 (3):29–35, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2003:PAP

[HRT03] Michael C. Huang, Jose Renau, and Josep Torrellas. Positional adaptation of processors: application to energy reduction. *ACM SIGARCH Computer Architecture News*, 31(2):157–168, May 2003. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Hofmann:2009:MBM

[HRW09] Owen S. Hofmann, Christopher J. Rossbach, and Emmett Witchel. Maximum benefit from a minimal HTM. *ACM SIGARCH Computer Architecture News*, 37(1):145–156, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hemphill:1973:DDG

[HS73] John M. Hemphill and S. A. Szygenda. Deriving design guidelines for diagnosable computer systems. *ACM SIGARCH Computer Architecture News*, 2(4):131–135, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huen:1974:IPR

[HS74] W. H. Huen and D. P. Siewiorek. Intermodule protocol for register transfer level modules: representation and analytic tools. *ACM SIGARCH Computer Architecture News*, 3(4):56–62, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harris:1977:HMO

[HS77] J. Archer Harris and David R. Smith. Hierarchical multiprocessor organizations. *ACM SIGARCH Computer Architecture News*, 5(7):41–48, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hamacher:1980:PCF

[HS80] V. Carl Hamacher and Gerald S. Shedler. Performance of a collision-free local bus network having asynchronous distributed control. *ACM SIGARCH Computer Architecture News*, 8(3):80–87, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hill:1984:EEC

[HS84] Mark D. Hill and Alan Jay Smith. Experimental evaluation of on-chip microprocessor cache memories. *ACM SIGARCH Computer Architecture News*, 12(3):158–166, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hasegawa:1985:HST

[HS85a] Makoto Hasegawa and Yoshiharu Shigei. High-speed top-of-stack scheme for VLSI processor: a management algorithm and its analysis. *ACM SIGARCH Computer Architecture News*, 13(3):48–54, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hitchcock:1985:AMR

[HS85b] Charles Y. Hitchcock III and H. M. Brinkley Sprunt. Analyzing multiple register sets. *ACM SIGARCH Computer Architecture News*, 13(3):55–63, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hurson:1985:SMU

[HS85c] A. R. Hurson and B. Shirazi. A systolic multiplier unit and its VLSI design. *ACM SIGARCH Computer Architecture News*, 13(3):302–309, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hasegawa:1986:FFT

[HS86] M. Hasegawa and Y. Shigei. $AT^2 = O(N \log^4 N), T = O(\log N)$ Fast Fourier Transform in a light connected 3-dimensional VLSI. *ACM SIGARCH Computer Architecture News*, 14(2):252–260, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ho:1990:BAD

[HS90] Samuel Ho and Lawrence Snyder. Balance in architectural design. *ACM SIGARCH Computer Architecture News*, 18(3a):302–310, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1993:PCD

[HS93] W.-C. Hsu and J. E. Smith. Performance of cached DRAM organizations in vector supercomputers. *ACM SIGARCH Computer Architecture News*, 21(2):327–336, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hilgendorf:2001:ITE

[HS01] Rolf Hilgendorf and Wolfram Sauer. Instruction translation for an experimental S/390 processor. *ACM SIGARCH Computer Architecture News*, 29(1):37–42, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hu:2006:RST

[HS06] Shiliang Hu and James E. Smith. Reducing startup time in co-designed virtual machines. *ACM SIGARCH Computer Architecture News*, 34 (2):277–288, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huang:2010:ICM

[HS10] Ruirui Huang and G. Edward Suh. IVEC: off-chip memory integrity protection for both security and reliability. *ACM SIGARCH Computer Architecture News*, 38(3):395–406, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hechtman:2013:EMC

[HS13] Blake A. Hechtman and Daniel J. Sorin. Exploring memory consistency for massively-threaded throughput-oriented processors. *ACM SIGARCH Computer Architecture News*, 41(3):201–212, June 2013. ICSA '13 conference proceedings.

Hasabnis:2016:LAI

[HS16] Niranjan Hasabnis and R. Sekar. Lifting assembly to intermediate representation: a novel approach leveraging compilers. *ACM SIGARCH Computer Architecture News*, 44 (2):311–324, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Houtgast:2016:EGI

[HSBA16] Ernst Joachim Houtgast, VladMihai Sima, Koen Bertels, and Zaid AlArs. An efficient GPUAccelerated implementation of genomic short read mapping with BWAMEM. *ACM SIGARCH Computer Architecture News*, 44(4):38–43, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Holmer:1990:FPE

[HSC+90] Bruce K. Holmer, Barton Sano, Michael Carlton, Peter Van Roy, Ralph Haygood, William R. Bush, Alvin M. Despain, Joan M. Pendleton, and Tep Dobry. Fast Prolog with an extended general purpose architecture. *ACM SIGARCH Computer Architecture News*, 18(3a):282–291, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hoffmann:2011:DKR

[HSC+11] Henry Hoffmann, Stelios Sidiroglou, Michael Carbin, Sasa Misailovic, Anant Agarwal, and Martin Rinard. Dynamic knobs for responsive power-aware computing. *ACM SIGARCH Computer Architecture News*, 39(1):199–212, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Holt:1996:AAB

[HSH96] Chris Holt, Jaswinder Pal Singh, and John Hennessy. Application and architectural bottlenecks in large scale distributed shared memory machines. *ACM SIGARCH Computer Architecture News*, 24(2):134–145, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hicks:2015:SLR

[HSKS15] Matthew Hicks, Cynthia Sturton, Samuel T. King, and Jonathan M. Smith. SPECS: a lightweight runtime mechanism for protecting software from security-critical processor bugs. *ACM SIGARCH Computer Architecture News*, 43(1):517–529, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hu:2017:TFC

[HSL17] Yang Hu, Mingcong Song, and Tao Li. Towards "Full Containerization" in containerized network function virtualization. *ACM SIGARCH Computer Architecture News*, 45 (1):467–481, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Huang:1994:SDC

[HSS94] A. S. Huang, G. Slavenburg, and J. P. Shen. Speculative disambiguation: a compilation technique for dynamic memory disambiguation. *ACM SIGARCH Computer Architecture News*, 22(2):200–210, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hwang:2012:CRD

[HSS12] Andy A. Hwang, Ioan A. Stefanovici, and Bianca Schroeder. Cosmic rays don't strike twice: understanding the nature of DRAM errors and the implications for system design. *ACM SIGARCH Computer Architecture News*, 40(1):111–122, March 2012. ASPLOS '12 conference proceedings.

Hill:2000:SAD

[HSW+00] Jason Hill, Robert Szewczyk, Alec Woo, Seth Hollar, David Culler, and Kristofer Pister. System architecture directions for networked sensors. *ACM SIGARCH Computer Architecture News*, 28(5):93–104, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hormati:2011:SPS

[HSW+11] Amir H. Hormati, Mehrzad Samadi, Mark Woh, Trevor Mudge, and Scott Mahlke. Sponge: portable stream programming on graphics engines. *ACM SIGARCH Computer Architecture News*, 39 (1):381–392, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Horita:2010:FBF

[HT10] Tadayoshi Horita and Itsuo Takanami. An FPGA-based fast classifier with high generalization property. *ACM SIGARCH Computer Architecture News*, 38(4):21–26, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Honarmand:2014:RRR

[HT14a] Nima Honarmand and Josep Torrellas. RelaxReplay: record and replay for relaxed-consistency multiprocessors. *ACM SIGARCH Computer*

Architecture News, 42(1):223–238, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Honarmand:2014:RDL

[HT14b] Nima Honarmand and Josep Torrellas. Replay debugging: leveraging record and replay for program debugging. *ACM SIGARCH Computer Architecture News*, 42 (3):445–456, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ha:2008:NBP

[HTA08] Phuong Hoai Ha, Philippas Tsigas, and Otto J. Anshus. Non-blocking programming on multi-core graphics processors: (extended abstract). *ACM SIGARCH Computer Architecture News*, 36(5):19–28, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Harris:2010:DFM

[HTCU10] Tim Harris, Sasa Tomic, Adrián Cristal, and Osman Unsal. Dynamic filtering: multi-purpose architecture support for language runtime systems. *ACM SIGARCH Computer Architecture News*, 38(1):39–52, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hempstead:2005:ULP

[HTM+05] Mark Hempstead, Nikhil Tripathi, Patrick Mauro, Gu-Yeon Wei, and David Brooks. An ultra low power system architecture for sensor network applications. *ACM SIGARCH Computer Architecture News*, 33(2):208–219, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hayashi:2015:LRO

[HTM15] Ami Hayashi, Yuta Tokusashi, and Hiroki Matsutani. A line rate outlier filtering FPGA NIC using 10GbE interface. *ACM SIGARCH Computer Architecture News*, 43(4):22–27, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Hu:1985:DAE

[Hu85] Weiming Hu. Dataflow architecture for EEG patient monitor. *ACM SIGARCH Computer Architecture News*, 13 (2):3–10, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Huguet:1982:PPS

[Hug82] Miquel Huguet. The protection of the processor status word of the PDP-11/60. *ACM SIGARCH Computer Architecture News*, 10 (4):27–30, June 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hummel:1996:EDS

[Hum96] Susan Flynn Hummel. Efficient data sharing with conditional remote memory transfers. *ACM SIGARCH Computer Architecture News*, 24 (5):9–17, December 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hari:2014:GGE

[HVAN14] Siva Kumar Sastry Hari, Radha Venkatagiri, Sarita V. Adve, and Helia Naeimi. GangES: gang error simulation for hardware resiliency evaluation. *ACM SIGARCH Computer Architecture News*, 42(3):61–72, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Halatsis:1980:ACM

[HvDJL80] C. Halatsis, A. van Dam, J. Joosten, and M. Letheren. Architectural considerations for a microprogrammable emulating engine using bit-slices. *ACM SIGARCH Computer Architecture News*, 8(3):278–291, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hangal:2004:TPV

[HVML04] Sudheendra Hangal, Durgam Vahia, Chaiyasit Manovit, and Juin-Yeu Joseph Lu. TSOtool: a program for verifying memory systems using the memory consistency model. *ACM SIGARCH Computer Architecture News*, 32 (2):114, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hagan:1977:VMS

[HW77] R. A. Hagan and C. S. Wallace. A virtual memory system for the Hewlett Packard 2100A. *ACM SIGARCH Computer Architecture News*, 6(5):5–13, December 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Halstead:1980:MSD

[HW80] Robert H. Halstead, Jr. and Stephen A. Ward. The MuNet: a scalable decentralized architecture for parallel computation. *ACM SIGARCH Computer Architecture News*, 8(3):139–145, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hermenegildo:1987:DHP

[HW87] M. V. Hermenegildo and R. A. Warren. Designing a high performance parallel logic programming system. *ACM SIGARCH Computer Architecture News*, 15(1):43–52, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hsu:1995:SAC

[HW95] Tsong-Chih Hsu and Sheng-De Wang. A simple architecture for constant time sorting machines. *ACM SIGARCH Computer Architecture News*, 23(1):13–19, March 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Herbordt:1991:MPA

[HWC91] Martin C. Herbordt, Charles C. Weems, and James C. Corbett. Message-passing algorithms for a SIMD torus with coteries. *ACM SIGARCH Computer Architecture News*, 19(1):69–78, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hammond:2004:TMC

[HWC+04] Lance Hammond, Vicky Wong, Mike Chen, Brian D. Carlstrom, John D. Davis, Ben Hertzberg, Manohar K. Prabhu, Honggo Wijaya, Christos Kozyrakis, and Kunle Olukotun. Transactional memory coherence and consistency. *ACM SIGARCH Computer Architecture News*, 32(2):102, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hayashizaki:2011:IPT

[HWI+11] Hiroshige Hayashizaki, Peng Wu, Hiroshi Inoue, Mauricio J. Serrano, and Toshio Nakatani. Improving the performance of trace-based systems by false loop filtering. *ACM SIGARCH Computer Architecture News*, 39(1):405–418, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hu:1997:OES

[HX97] Weiwu Hu and Peisu Xia. Out-of-order execution in sequentially consistent shared-memory systems. *ACM SIGARCH Computer Architecture News*, 25(4):3–10, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hor:1985:DPP

[HY85] T. M. Hor and C. K. Yuen. The design and programming of a powerful short wordlength processor using context-dependent machine instructions. *ACM SIGARCH Computer Architecture News*, 13(1):12–26, March 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hu:1996:DDC

[HY96] Yiming Hu and Qing Yang. DCD—disk caching disk: a new approach for boosting I/O performance. *ACM SIGARCH Computer Architecture News*, 24(2):169–178, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Hyatt:1993:HPO

[Hya93] Craig Hyatt. A high-performance object-oriented memory. *ACM SIGARCH Computer Architecture News*, 21(4):11–19, September 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ho:1995:AVP

[HYHD95] Richard C. Ho, C. Han Yang, Mark A. Horowitz, and David L. Dill. Architecture validation for processors. *ACM SIGARCH Computer Architecture News*, 23(2):404–413, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iannucci:1994:AII

[IAD+94] Robert Iannucci, Anant Agarwal, Bill Dally, Anoop Gupta, Greg Papadopoulos, and Burton Smith. Architectural and implementation issues for multithreading (panel session I). *ACM SIGARCH Computer Architecture News*, 22(1):3–18, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iannucci:1988:TDN

[Ian88] R. A. Iannucci. Toward a dataflow/von Neumann hybrid architecture. *ACM SIGARCH Computer Architecture News*, 16(2):131–140, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Isa:2012:EAS

[IBC12] M. N. Isa, K. Benkrid, and T. Clayton. Efficient architecture and scheduling technique for pairwise sequence alignment. *ACM SIGARCH Computer Architecture News*, 40(4):26–31, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ipek:2010:DRM

[ICN+10] Engin Ipek, Jeremy Condit, Edmund B. Nightingale, Doug Burger, and Thomas Moscibroda. Dynamically replicated memory: building reliable systems from nanoscale resistive memories. *ACM SIGARCH Computer Architecture News*, 38(1):3–14, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ibbett:1985:MPV

[ICT85] R. N. Ibbett, P. C. Capon, and N. P. Topham. MU6V: a parallel vector processing system. *ACM SIGARCH Computer Architecture News*, 13(3):136–144, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

IEEE:1976:CPA

[IEE76] IEEE, editor. *Conference Proceedings: 3rd Annual Symposium on Computer Architecture, Clearwater, Florida, January 19–21,* *1976*, volume ??(??) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1976. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN ???? URL `http://portal.acm.org/toc.cfm?id=800110`. IEEE no. 75CH1043-5C.

IEEE:1977:CPA

[IEE77] IEEE, editor. *Conference Proceedings: 4th Annual Symposium on Computer Architecture, Silver Spring, Maryland, March 23–25, 1977*, volume ??(??) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1977. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN QA76.9.A73 S97 1977. URL `http://portal.acm.org/toc.cfm?id=800255`. IEEE no. 77 CH1182-5C.

IEEE:1979:CPA

[IEE79] IEEE, editor. *Conference Proceedings: 5th Annual Symposium on Computer Architecture, Palo Alto, California, April 23–25, 1979*, volume 6(7) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1979. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN ???? URL `http://portal.acm.org/toc.cfm?id=800094`.

IEEE:1981:CPA

[IEE81] IEEE, editor. *Conference Proceedings: 8th Annual Symposium on Computer Architecture, Minneapolis, Minnesota, May 12–14, 1981*, ACM SIGARCH Computer Architecture News. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1981. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN ???? URL `http://portal.acm.org/toc.cfm?id=800052`.

IEEE:1982:CPA

[IEE82] IEEE, editor. *Conference proceedings: the 9th annual Symposium on Computer Architecture: April 26–29, 1982, Austin, Texas*, volume 10(3) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1982. CODEN CANED2, CPAADU. ISBN

???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN QA76.9.A73 S97 1982. URL `http://portal.acm.org/toc.cfm?id=800048`. ACM order no. 415820. IEEE catalogue no. 82CH1754-1. IEEE Computer Society order no. 411.

IEEE:1983:CPA

[IEE83] IEEE, editor. *Conference proceedings: the 10th annual International Symposium on Computer Architecture, Royal Institute of Technology, Stockholm, Sweden*, volume 11(3) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1983. CODEN CANED2. ISBN 0-89791-101-6. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 .S97 1983. URL `http://portal.acm.org/toc.cfm?id=800046`. ACM order number 415830. IEEE catalog no. 83CH1889-5. IEEE Computer Society order no. 473.

IEEE:1984:AIS

[IEE84] IEEE, editor. *The 11th Annual International Symposium on Computer Architecture, June 5–7, 1984, Ann Arbor, Michigan conference proceedings*, volume 12(3) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984. CODEN CANED2. ISBN 0-8186-0538-3 (paperback). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 S97 1984. URL `http://portal.acm.org/toc.cfm?id=800015`. ACM order no. 415840. IEEE catalog no. 84CH2051-1. IEEE Computer Society no. 538.

IEEE:1985:AIS

[IEE85] IEEE, editor. *The 12th Annual International Symposium on Computer Architecture, June 17–19, 1985, Boston, Massachusetts: conference proceedings*, volume 13(3) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1985. CODEN CANED2. ISBN 0-8186-0634-7. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 C65. URL `http://portal.acm.org/toc.cfm?id=327010`. ACM order no. 415850. IEEE catalog no. 85CH2144-4. IEEE Computer Society order no. 634.

IEEE:1986:CPT

[IEE86] IEEE, editor. *Conference proceedings: the thirteenth annual International symposium on computer Architec-*

ture, June 2–5, 1986, Tokyo, Japan, volume 14(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1986. CODEN CANED2. ISBN 0-8186-8719-3. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I56 1986. URL `http://portal.acm.org/toc.cfm?id=17407`. ACM order number 415860. IEEE catalogue number 86CH12291-3. IEEE Computer society order number 719.

IEEE:1987:AIS

[IEE87] IEEE, editor. *The 14th Annual International Symposium on Computer Architecture, June 2–5, 1987, Pittsburgh, Pennsylvania: Conference proceedings*, volume 15(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1987. CODEN CANED2. ISBN 0-8186-8776-2 (casebound), 0-8186-0776-9 (paperback), 0-8186-0776-9 (microfiche), 0-8186-4776-0 (casebound). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I56 1987. URL `http://portal.acm.org/toc.cfm?id=30350`. ACM Order No. 415870.

IEEE:1988:AIS

[IEE88] IEEE, editor. *The 15th Annual International Symposium on Computer Architecture: Conference proceedings, May 30–June 2, 1988, Honolulu, Hawaii*, volume 16(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. CODEN CANED2. ISBN 0-8186-0861-7 (paperback), 0-8186-4861-9 (microfiche), 0-8186-8861-0 (case). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 C65. URL `http://portal.acm.org/toc.cfm?id=52400`. ACM order no. 415880.

IEEE:1990:PAI

[IEE90] IEEE, editor. *Proceedings: the 17th annual International Symposium on Computer Architecture, May 28–31, 1990, Seattle, Washington*, volume 18(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990. CODEN CANED2. ISBN 0-8186-9047-X (casebound), 0-89791-366-3, 0-8186-2047-1 (paperback), 0-8186-6047-3 (microfiche). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I56 1990. URL `http://portal.acm.`

`org/toc.cfm?id=325164`. ACM order no. 415900.

IEEE:1992:PAI

[IEE92] IEEE, editor. *Proceedings, the 19th annual International Symposium on Computer Architecture: May 19–21, 1992, Gold Coast, Queensland, Australia*, volume 20(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992. CODEN CANED2. ISBN 0-89791-509-7 (soft cover), 0-8186-2940-1 (perfect bound), 0-8186-2942-8 (casebound), 0-8186-2941-X (microfiche). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 I56 1992. URL `http://portal.acm.org/toc.cfm?id=139669`. ACM order number 415920. IEEE catalog number 92CH3156-7. IEEE Computer Society order number 2940.

IEEE:1994:PAI

[IEE94] IEEE, editor. *Proceedings: the 21st Annual International Symposium on Computer Architecture, April 18–21, 1994, Chicago, Illinois*, volume 22(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994. CODEN CANED2. ISBN 0-8186-5510-0 (paper), 0-8186-5511-9 (microfiche), 0-8186-5512-7 (casebound). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73 S97 1994. URL `http://portal.acm.org/toc.cfm?id=191995`.

IEEE:1999:PIS

[IEE99] IEEE, editor. *Proceedings of the 26th International Symposium on Computer Architecture: May 2–4, 1999, Atlanta, Georgia*, ACM SIGARCH Computer Architecture News. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999. CODEN CANED2. ISBN 0-7695-0170-2, 0-7695-0171-0 (casebound). ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76.9.A73. S9 1999. URL `http://portal.acm.org/toc.cfm?id=300979`. IEEE Computer Society Order Number PR00170. IEEE Order Plan Catalog Number 98CB36367.

IEEE:2003:PAI

[IEE03] IEEE, editor. *Proceedings: 30th Annual International Symposium on Computer Architecture: San Diego, California, USA, June 9–11, 2003: ISCA '03*, volume 31(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

CODEN CANED2. ISBN 0-7695-1945-8. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN QA76 .S93 2002. URL http://portal.acm.org/toc.cfm?id=859618.

IEEE:2005:ISC

[IEE05] IEEE, editor. *32nd International Symposium on Computer Architecture: proceedings, Madison, Wisconsin, June 4–8, 2005*, volume 33(2) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005. CODEN CANED2. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN ???? URL http://portal.acm.org/toc.cfm?id=1069807. Includes CD-ROM.

IEEE:2006:ISC

[IEE06] IEEE, editor. *33rd International Symposium on Computer Architecture: proceedings, Boston, MA, USA, June 17–21, 2006*, volume ??(??) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006. CODEN CANED2. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE). LCCN ???? URL http://www.ece.neu.edu/conf/isca2006/.

Irwin:1980:OPS

[IH80] Mary Jane Irwin and Don Heller. Online pipeline systems for recursive numeric computations. *ACM SIGARCH Computer Architecture News*, 8(3):292–299, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ibbett:1989:AMS

[IHM89] R. N. Ibbett, T. M. Hopkins, and K. I. M. McKinnon. Architectural mechanisms to support sparse vector processing. *ACM SIGARCH Computer Architecture News*, 17 (3):64–71, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Izraelevitz:2016:FAP

[IKK16] Joseph Izraelevitz, Terence Kelly, and Aasheesh Kolli. Failure-atomic persistent memory updates via JUSTDO logging. *ACM SIGARCH Computer Architecture News*, 44 (2):427–442, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ipek:2007:CFA

[IKKM07] Engin Ipek, Meyrem Kirman, Nevin Kirman, and Jose F. Martinez. Core fusion: accommodating software diversity in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 35(2):186–197, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iliffe:1987:FLM

[Ili87] J. K. Iliffe. A forward-looking method of Cache memory control. *ACM SIGARCH Computer Architecture News*, 15(4):4–10, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iyer:2002:PPE

[IM02] Anoop Iyer and Diana Marculescu. Power and performance evaluation of globally asynchronous locally synchronous processors. *ACM SIGARCH Computer Architecture News*, 30(2):158–168, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ipek:2006:EEA

[İMC+06] Engin İpek, Sally A. McKee, Rich Caruana, Bronis R. de Supinski, and Martin Schulz. Efficiently exploring architectural design spaces via predictive modeling. *ACM SIGARCH Computer Architecture News*, 34(5):195–206, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Isci:2013:AEV

[IMK+13] Canturk Isci, Suzanne McIntosh, Jeffrey Kephart, Rajarshi Das, James Hanson, Scott Piper, Robert Wolford, Thomas Brey, Robert Kantner, Allen Ng, James Norris, Abdoulaye Traore, and Michael Frissora. Agile, efficient virtualization power management with low-latency server power states. *ACM SIGARCH Computer Architecture News*, 41(3):96–107, June 2013. ICSA '13 conference proceedings.

Ipek:2008:SOM

[IMMC08] Engin Ipek, Onur Mutlu, José F. Martínez, and Rich Caruana. Self-optimizing memory controllers: a reinforcement learning approach. *ACM SIGARCH Computer Architecture News*, 36(3):39–50, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Inoue:2005:EST

[Ino05] Koji Inoue. Energy-security tradeoff in a secure cache architecture against buffer overflow attacks. *ACM SIGARCH Computer Architecture News*, 33(1):81–89, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Isailovic:2006:INS

[IPWK06] Nemanja Isailovic, Yatish Patel, Mark Whitney, and John Kubiatowicz. Interconnection networks for scalable quantum computers. *ACM SIGARCH Computer Architecture News*,

34(2):366–377, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Irwin:1986:STR

[Irw86] Mary Jane Irwin. Secretary/treasurer's Report. *ACM SIGARCH Computer Architecture News*, 14(4):28, September 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Irwin:2010:SCM

[Irw10] Mary Jane Irwin. Shared caches in multicores: the good, the bad, and the ugly. *ACM SIGARCH Computer Architecture News*, 38 (3):234, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Intrater:1992:PED

[IS92] Gideon Intrater and Ilan Spillinger. Performance evaluation of a decoded instruction cache for variable instruction-length computers. *ACM SIGARCH Computer Architecture News*, 20(2):106–113, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Isaacson:1974:PSP

[Isa74] Portia Isaacson. Picture systems, PS, and the design of a channel-to-channel computer interface. *ACM SIGARCH Computer Architecture News*, 3(4):63–70, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Irie:2007:PTE

[ISGS07] Hidetsugu Irie, Ken Sugimoto, Masahiro Goshima, and Shuich Sakai. Preventing timing errors on register writes: mechanisms of detections and recoveries. *ACM SIGARCH Computer Architecture News*, 35(5):25–31, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iyer:2004:ESI

[ISJ04] Bharath Iyer, Sadagopan Srinivasan, and Bruce Jacob. Extended split-issue: Enabling flexibility in the hardware implementation of NUAL VLIW DSPs. *ACM SIGARCH Computer Architecture News*, 32(2):364, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ito:1986:APE

[ISKR86] N. Ito, M. Sato, E. Kuno, and K. Rokusawa. The architecture and preliminary evaluation results of the experimental parallel inference machine PIM-D. *ACM SIGARCH Computer Architecture News*, 14(2):149–156, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Iftode:1996:UAP

[ISL96] Liviu Iftode, Jaswinder Pal Singh, and Kai Li. Understanding application performance on shared virtual memory systems. *ACM SIGARCH Computer Architecture News*, 24(2):122–133, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ishikawa:1984:DOO

[IT84] Yutaka Ishikawa and Mario Tokoro. The design of an object oriented architecture. *ACM SIGARCH Computer Architecture News*, 12(3):178–187, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Inoue:1993:PEV

[IT93] Atsushi Inoue and Kenji Takeda. Performance evaluation for various configuration of superscalar processors. *ACM SIGARCH Computer Architecture News*, 21(1):4–11, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ivanovic:1991:BRC

[Iva91] Vladimir G. Ivanovic. Book review: *Computation Structures* by Stephen A Ward and Robert H. Halstead, Jr. (MIT Press or McGraw-Hill, 1990). *ACM SIGARCH Computer Architecture News*, 19 (5):27–29, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Isailovic:2008:RQC

[IWPK08] Nemanja Isailovic, Mark Whitney, Yatish Patel, and John Kubiatowicz. Running a quantum circuit at the speed of data. *ACM SIGARCH Computer Architecture News*, 36(3):177–188, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:2006:GMB

[JADAD06] Stephen T. Jones, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. Geiger: monitoring the buffer cache in a virtual machine environment. *ACM SIGARCH Computer Architecture News*, 34(5):14–24, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jagannathan:1980:TAI

[Jag80] Anand Jagannathan. A technique for the architectural implementation of software subsystems. *ACM SIGARCH Computer Architecture News*, 8(3):236–244, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:1982:DPT

[Jai82] Bijendra N. Jain. Duplication of packets and their detection in X.25 communication protocols. *ACM SIGARCH*

Computer Architecture News, 10(3):267–273, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jensen:1976:MIS

[JB76] John E. Jensen and Jean-Loup Baer. A model of interference in a shared resource multiprocessor. *ACM SIGARCH Computer Architecture News*, 4(4): 52–57, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jenevein:1982:CPR

[JB82] R. M. Jenevein and J. C. Browne. A control processor for a reconfigurable array computer. *ACM SIGARCH Computer Architecture News*, 10 (3):81–89, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jutla:1997:IAP

[JB97] D. N. Jutla and P. Bodorik. Improving applications performance: a memory model and cache architecture. *ACM SIGARCH Computer Architecture News*, 25(4):22–29, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1989:UVS

[JBW89] N. P. Jouppi, J. Bertoni, and D. W. Wall. A unified vector/scalar floating-point architecture. *ACM SIGARCH Computer Architecture News*, 17(2):134–143, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jung:2014:HHI

[JCS+14] Myoungsoo Jung, Wonil Choi, Shekhar Srikantaiah, Joonhyuk Yoo, and Mahmut T. Kandemir. HIOS: a host interface I/O scheduler for solid state disks. *ACM SIGARCH Computer Architecture News*, 42(3):289–300, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jung:2014:TNS

[JCSK14] Myoungsoo Jung, Wonil Choi, John Shalf, and Mahmut Taylan Kandemir. Triple-A: a non-SSD based autonomic all-flash array for high performance storage systems. *ACM SIGARCH Computer Architecture News*, 42(1):441–454, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jainandunsing:1988:DCC

[JD88] K. Jainandunsing and E. F. Deprettere. Design of a concurrent computer for solving systems of linear equations. *ACM SIGARCH Computer Architecture News*, 16(2):204–211, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jenevein:1981:EHS

[JDL81] R. M. Jenevein, ?. DeGroot, and G. Jack Lipovski. Errata: "A hardware support mechanism for scheduling resources in parallel machine environment": (from Proceedings of the 8th Annual Symposium on Computer Architecture, p. 57). *ACM SIGARCH Computer Architecture News*, 9(5): 17, August 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jensen:1974:DFC

[Jen74] E. Douglas Jensen. A distributed function computer for real-time control. *ACM SIGARCH Computer Architecture News*, 3(4):176–182, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jennings:1978:VP

[Jen78] Hal W. Jennings. A variation on the PDP 11. *ACM SIGARCH Computer Architecture News*, 7(3):17–26, October 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Joseph:1997:PUM

[JG97] Doug Joseph and Dirk Grunwald. Prefetching using Markov predictors. *ACM SIGARCH Computer Architecture News*, 25(2):252–263, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Joe:1994:EMO

[JH94] T. Joe and J. L. Hennessy. Evaluating the memory overhead required for COMA architectures. *ACM SIGARCH Computer Architecture News*, 22(2):82–93, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jeon:2016:TTD

[JHK+16] Myeongjae Jeon, Yuxiong He, Hwanju Kim, Sameh Elnikety, Scott Rixner, and Alan L. Cox. TPC: Target-driven parallelism combining prediction and correction to reduce tail latency in interactive services. *ACM SIGARCH Computer Architecture News*, 44 (2):129–141, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jimenez:2005:PLB

[Jim05] Daniel A. Jimenez. Piecewise linear branch prediction. *ACM SIGARCH Computer Architecture News*, 33(2):382–393, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jensen:1977:HMM

[JK77] E. Douglas Jensen and Richard Y. Kain. The Honeywell Modular Microprogram Machine: M3. *ACM SIGARCH Computer Architecture News*, 5(7): 17–28, March 1977. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Janjusic:2013:GMP

[JK13] Tomislav Janjusic and Krishna Kavi. Gleipnir: a memory profiling and tracing tool. *ACM SIGARCH Computer Architecture News*, 41(4):8–12, September 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jiang:2009:IAR

[JKD09] Nan Jiang, John Kim, and William J. Dally. Indirect adaptive routing on large scale interconnection networks. *ACM SIGARCH Computer Architecture News*, 37(3):220–231, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jog:2013:OSP

[JKM+13] Adwait Jog, Onur Kayiran, Asit K. Mishra, Mahmut T. Kandemir, Onur Mutlu, Ravishankar Iyer, and Chita R. Das. Orchestrated scheduling and prefetching for GPGPUs. *ACM SIGARCH Computer Architecture News*, 41 (3):332–343, June 2013. ICSA '13 conference proceedings.

Jog:2013:OCT

[JKN+13] Adwait Jog, Onur Kayiran, Nachiappan Chidambaram Nachiappan, Asit K. Mishra, Mahmut T. Kandemir, Onur Mutlu, Ravishankar Iyer, and Chita R. Das. OWL: cooperative thread array aware scheduling techniques for improving GPGPU performance. *ACM SIGARCH Computer Architecture News*, 41(1):395–406, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jouppi:2005:ISI

[JKT05] Norman P. Jouppi, Rakesh Kumar, and Dean Tullsen. Introduction to the special issue on the 2005 Workshop on Design, Analysis, and Simulation of Chip Multiprocessors (dasCMP'05). *ACM SIGARCH Computer Architecture News*, 33(4):4, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:2009:ISI

[JKT09] Norman P. Jouppi, Rakesh Kumar, and Dean Tullsen. Introduction to the special issue on the 2008 Workshop on Design, Analysis, and Simulation of Chip Multiprocessors (dasCMP'08). *ACM SIGARCH Computer Architecture News*, 37(2):1, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:2016:BFL

[JL16] Akanksha Jain and Calvin Lin. Back to the future:

leveraging Belady's algorithm for improved cache replacement. *ACM SIGARCH Computer Architecture News*, 44 (3):78–89, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jain:2015:ADA

[JLFM15] Abhishek Kumar Jain, Xiangwei Li, Suhaib A. Fahmy, and Douglas L. Maskell. Adapting the DySER architecture with DSP blocks as an overlay for the Xilinx Zynq. *ACM SIGARCH Computer Architecture News*, 43(4):28–33, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Juan:1996:DBC

[JLN96] Toni Juan, Tomás Lang, and Juan J. Navarro. The difference-bit cache. *ACM SIGARCH Computer Architecture News*, 24(2):114–120, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jesshope:2009:ISM

[JLZ09] Chris Jesshope, Mike Lankamp, and Li Zhang. The implementation of an SVP many-core processor and the evaluation of its memory architecture. *ACM SIGARCH Computer Architecture News*, 37 (2):38–45, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jenevein:1988:TAR

[JM88] R. M. Jenevein and T. Mookken. Traffic analysis of rectangular SW-banyan networks. *ACM SIGARCH Computer Architecture News*, 16(2):333–342, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Juurlink:2012:ALP

[JM12] B. H. H. Juurlink and C. H. Meenderinck. Amdahl's law for predicting the future of multicores considered harmful. *ACM SIGARCH Computer Architecture News*, 40 (2):1–9, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Joao:2008:IPO

[JMK+08] Jose A. Joao, Onur Mutlu, Hyesoon Kim, Rishi Agarwal, and Yale N. Patt. Improving the performance of object-oriented languages with dynamic predication of indirect jumps. *ACM SIGARCH Computer Architecture News*, 36(1):80–90, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Joao:2009:FRC

[JMP09] José A. Joao, Onur Mutlu, and Yale N. Patt. Flexible reference-counting-based hardware acceleration for garbage collection. *ACM SIGARCH Computer Architecture News*, 37(3):418–428, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1997:RTA

[JmWH97] Teresa L. Johnson and Wen mei W. Hwu. Run-time adaptive cache hierarchy management via reference analysis. *ACM SIGARCH Computer Architecture News*, 25(2):315–326, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jesshope:1989:HPC

[JMY89] C. R. Jesshope, P. R. Miller, and J. T. Yantchev. High performance communications in processor networks. *ACM SIGARCH Computer Architecture News*, 17(3):150–157, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jaleel:2012:CCR

[JNaS+12] Aamer Jaleel, Hashem H. Najaf-abadi, Samantika Subramaniam, Simon C. Steely, and Joel Emer. CRUISE: cache replacement and utility-aware scheduling. *ACM SIGARCH Computer Architecture News*, 40(1):249–260, March 2012. ASPLOS '12 conference proceedings.

Joerg:1990:SPN

[Joe90] Werner B. Joerg. A subclass of Petri Nets as design abstraction for parallel architectures. *ACM SIGARCH Computer Architecture News*, 18(4):67–77, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1982:SRA

[Joh82] Mark Scott Johnson. Some requirements for architectural support of software debugging. *ACM SIGARCH Computer Architecture News*, 10(2):140–148, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1988:CMM

[Joh88] Eric E. Johnson. Completing an MIMD multiprocessor taxonomy. *ACM SIGARCH Computer Architecture News*, 16(3):44–47, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1989:WSP

[Joh89] Eric E. Johnson. Working set prefetching for cache memories. *ACM SIGARCH Computer Architecture News*, 17 (6):137–141, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1991:CRB

[Joh91] Douglas Johnson. The case for a read barrier. *ACM SIGARCH Computer Architecture News*, 19(2):279–287, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1992:ICL

[Joh92] Kirk L. Johnson. The impact of communication locality on large-scale multiprocessor performance. *ACM SIGARCH Computer Architecture News*, 20(2):392–402, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:1995:GMW

[Joh95] Eric E. Johnson. Graffiti on "the memory wall". *ACM SIGARCH Computer Architecture News*, 23(4):7–8, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

John:2004:MFS

[Joh04] Lizy Kurian John. More on finding a single number to indicate overall performance of a benchmark suite. *ACM SIGARCH Computer Architecture News*, 32(1):3–8, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:1982:SPM

[Jon82] Douglas W. Jones. Systematic protection mechanism design. *ACM SIGARCH Computer Architecture News*, 10(2):77–80, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:1983:PM

[Jon83] Jeremy Jones. Puzzling with microcode. *ACM SIGARCH Computer Architecture News*, 11(5):8–12, December 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:1988:MC

[Jon88a] Douglas W. Jones. A minimal CISC. *ACM SIGARCH Computer Architecture News*, 16 (3):56–63, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:1988:RCR

[Jon88b] Douglas W. Jones. Risks of comparing RISCs. *ACM SIGARCH Computer Architecture News*, 16(5):33–34, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jones:1988:UR

[Jon88c] Douglas W. Jones. The ultimate RISC. *ACM SIGARCH Computer Architecture News*, 16(3):48–55, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jonsson:2008:SSE

[Jon08] Bengt Jonsson. State-space exploration for concurrent algorithms under weak memory orderings: (preliminary version). *ACM SIGARCH Computer Architecture News*, 36(5):65–71, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jordan:1983:PMH

[Jor83] Harry F. Jordan. Performance measurements on HEP — a pipelined MIMD computer. *ACM SIGARCH Computer Architecture News*, 11(3):207–212, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1988:SVS

[Jou88] Norman P. Jouppi. Superscalar vs. superpipelined machines. *ACM SIGARCH Computer Architecture News*, 16 (3):71–80, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1989:AOT

[Jou89] N. P. Jouppi. Architectural and organizational tradeoffs in the design of the MultiTitan CPU. *ACM SIGARCH Computer Architecture News*, 17(3):281–289, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1990:IDM

[Jou90] Norman P. Jouppi. Improving direct-mapped cache performance by the addition of a small fully-associative cache and prefetch buffers. *ACM SIGARCH Computer Architecture News*, 18(3a): 364–373, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1993:CWP

[Jou93] Norman P. Jouppi. Cache write policies and performance. *ACM SIGARCH Computer Architecture News*, 21(2):191–201, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1998:IDM

[Jou98a] Norman P. Jouppi. Improving direct-mapped cache performance by the addition of a small fully-associative cache prefetch buffers. In ACM [ACM98a], pages 388–397. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Jouppi:1998:RID

[Jou98b] Norman P. Jouppi. Retrospective: Improving direct-mapped cache performance by the addition of a small fully-associative cache and prefetch buffers. In ACM [ACM98a], pages 71–73. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Juang:2002:EEC

[JOW+02] Philo Juang, Hidekazu Oki, Yong Wang, Margaret Martonosi, Li Shiuan Peh, and Daniel Rubenstein. Energy-efficient computing for wildlife tracking: design tradeoffs and early experiences with ZebraNet. *ACM SIGARCH Computer Architecture News*, 30(5):96–107, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jerger:2008:VCT

[JPL08] Natalie Enright Jerger, Li-Shiuan Peh, and Mikko Lipasti. Virtual circuit tree multicasting: a case for on-chip hardware multicast support. *ACM SIGARCH Computer Architecture News*, 36(3):229–240, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Joldes:2014:SSH

[JPT14] Mioara Joldes, Valentina Popescu, and Warwick Tucker. Searching for sinks for the Hénon map using a multiple-precision GPU arithmetic library. *ACM SIGARCH Computer Architecture News*, 42(4):63–68, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jordan:1973:SDS

[JS73] Harry F. Jordan and Burton J. Smith. Structure of digital system description languages. *ACM SIGARCH Computer Architecture News*, 2(4):31–34, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jiang:1988:PMB

[JS88] H. Jiang and K. C. Smith. A partial-multiple-bus computer structure with improved cost effectiveness. *ACM SIGARCH Computer Architecture News*, 16(2):116–122, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jiang:1999:SAP

[JS99] Dongming Jiang and Jaswinder Pal Singh. Scaling application performance on a cache-coherent multiprocessor. *ACM SIGARCH*

Computer Architecture News, 27(2):305–316, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jacobson:2000:TP

[JS00] Quinn Jacobson and James E. Smith. Trace preconstruction. *ACM SIGARCH Computer Architecture News*, 28 (2):37–46, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Johnson:2010:DCM

[JSAM10] F. Ryan Johnson, Radu Stoica, Anastasia Ailamaki, and Todd C. Mowry. Decoupling contention management from scheduling. *ACM SIGARCH Computer Architecture News*, 38(1):117–128, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jevdjic:2017:ASC

[JSCM17] Djordje Jevdjic, Karin Strauss, Luis Ceze, and Henrique S. Malvar. Approximate storage of compressed and encrypted videos. *ACM SIGARCH Computer Architecture News*, 45 (1):361–373, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jourdan:1995:ECF

[JSL95] Stéphan Jourdan, Pascal Sainrat, and Daniel Litaize. Exploring configurations of functional units in an out-of-order superscalar processor. *ACM SIGARCH Computer Architecture News*, 23(2):117–125, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jing:2013:EES

[JSL+13] Naifeng Jing, Yao Shen, Yao Lu, Shrikanth Ganapathy, Zhigang Mao, Minyi Guo, Ramon Canal, and Xiaoyao Liang. An energy-efficient and scalable eDRAM-based register file architecture for GPGPU. *ACM SIGARCH Computer Architecture News*, 41(3):344–355, June 2013. ICSA '13 conference proceedings.

Joao:2012:BIS

[JSMP12] José A. Joao, M. Aater Suleman, Onur Mutlu, and Yale N. Patt. Bottleneck identification and scheduling in multithreaded applications. *ACM SIGARCH Computer Architecture News*, 40(1):223–234, March 2012. ASPLOS '12 conference proceedings.

Joao:2013:UBA

[JSMP13] José A. Joao, M. Aater Suleman, Onur Mutlu, and Yale N. Patt. Utility-based acceleration of multithreaded applications on asymmetric CMPs. *ACM SIGARCH Computer Architecture News*, 41(3):154–165, June 2013. ICSA '13 conference proceedings.

Juan:1998:DHL

[JSN98] Toni Juan, Sanji Sanjeevan, and Juan J. Navarro. Dynamic history-length fitting: a third level of adaptivity for branch prediction. *ACM SIGARCH Computer Architecture News*, 26(3):155–166, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:1993:SPO

[JSWB93] Ravi Jain, Kiran Somalwar, John Werth, and J. C. Browne. Scheduling parallel I/O operations. *ACM SIGARCH Computer Architecture News*, 21(5):47–54, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jaleel:2010:HPC

[JTSE10] Aamer Jaleel, Kevin B. Theobald, Simon C. Steely, Jr., and Joel Emer. High performance cache replacement using re-reference interval prediction (RRIP). *ACM SIGARCH Computer Architecture News*, 38(3):60–71, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jevdjic:2013:SDC

[JVF13] Djordje Jevdjic, Stavros Volos, and Babak Falsafi. Die-stacked DRAM caches for servers: hit ratio, latency, or bandwidth? Have it all with footprint cache. *ACM SIGARCH Computer Architecture News*, 41(3):404–415, June 2013. ICSA '13 conference proceedings.

Jafri:2013:WGI

[JVV13] Syed Ali Raza Jafri, Gwendolyn Voskuilen, and T. N. Vijaykumar. Wait-n-GoTM: improving HTM performance by serializing cyclic dependencies. *ACM SIGARCH Computer Architecture News*, 41 (1):521–534, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Johnsson:1982:OMP

[JW82] Richard K. Johnsson and John D. Wick. An overview of the mesa processor architecture. *ACM SIGARCH Computer Architecture News*, 10(2):20–29, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1989:AIL

[JW89] N. P. Jouppi and D. W. Wall. Available instruction-level parallelism for superscalar and superpipelined machines. *ACM SIGARCH Computer Architecture News*, 17(2):272–282, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jouppi:1994:TTL

[JW94] N. P. Jouppi and S. J. E. Wilton. Tradeoffs in two-level on-chip caching. *ACM SIGARCH Computer Architecture News*, 22(2):34–45, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:1995:AAE

[JW95] Ravi Jain and John Werth. Airdisks and airRAID (expanded extract): modeling and scheduling periodic wireless data broadcast. *ACM SIGARCH Computer Architecture News*, 23(4):23–28, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jokinen:1997:CDP

[JW97] Tommi Jokinen and Chia-Jiu Wang. Cache design with path balancing table, skewing and indirect tags. *ACM SIGARCH Computer Architecture News*, 25(3):6–12, June 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:1993:ISI

[JWB93] Ravi Jain, John Werth, and J. C. Browne. Introduction to the Special Issue on Input/Output in Parallel Computer Systems. *ACM SIGARCH Computer Architecture News*, 21(5):5–6, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jain:1994:SII

[JWB94] Ravi Jain, John Werth, and J. C. Browne. Special Issue on Input/Output in Parallel Computer Systems: Introduction. *ACM SIGARCH Computer Architecture News*, 22(4):3–4, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Jung:2012:PAQ

[JWK12] Myoungsoo Jung, Ellis H. Wilson III, and Mahmut Kandemir. Physically Addressed Queueing (PAQ): improving parallelism in solid state disks. *ACM SIGARCH Computer Architecture News*, 40 (3):404–415, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Jouppi:2017:DPA

[JYP+17] Norman P. Jouppi, Cliff Young, Nishant Patil, David Patterson, Gaurav Agrawal, Raminder Bajwa, Sarah Bates, Suresh Bhatia, Nan Boden, Al Borchers, Rick Boyle, Pierre luc Cantin, Clifford Chao, Chris Clark, Jeremy Coriell, Mike Daley, Matt Dau, Jeffrey Dean, Ben Gelb, Tara Vazir Ghaemmaghami, Rajendra Gottipati, William Gulland, Robert Hagmann,

C. Richard Ho, Doug Hogberg, John Hu, Robert Hundt, Dan Hurt, Julian Ibarz, Aaron Jaffey, Alek Jaworski, Alexander Kaplan, Harshit Khaitan, Daniel Killebrew, Andy Koch, Naveen Kumar, Steve Lacy, James Laudon, James Law, Diemthu Le, Chris Leary, Zhuyuan Liu, Kyle Lucke, Alan Lundin, Gordon MacKean, Adriana Maggiore, Maire Mahony, Kieran Miller, Rahul Nagarajan, Ravi Narayanaswami, Ray Ni, Kathy Nix, Thomas Norrie, Mark Omernick, Narayana Penukonda, Andy Phelps, Jonathan Ross, Matt Ross, Amir Salek, Emad Samadiani, Chris Severn, Gregory Sizikov, Matthew Snelham, Jed Souter, Dan Steinberg, Andy Swing, Mercedes Tan, Gregory Thorson, Bo Tian, Horia Toma, Erick Tuttle, Vijay Vasudevan, Richard Walter, Walter Wang, Eric Wilcox, and Doe Hyun Yoon. In-datacenter performance analysis of a tensor processing unit. *ACM SIGARCH Computer Architecture News*, 45(2):1–12, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Jiang:2014:LPR

[JZYZ14] Lei Jiang, Bo Zhao, Jun Yang, and Youtao Zhang. A low power and reliable charge pump design for phase change memories. *ACM SIGARCH Computer Architecture News*, 42(3):397–408, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Krishnaswamy:1988:ALC

[KACG88] V. Krishnaswamy, S. Ahuja, N. Carriero, and D. Gelernter. The architecture of a Linda coprocessor. *ACM SIGARCH Computer Architecture News*, 16(2):240–249, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kundu:2004:CSI

[KADS04] Partha Kundu, Murali Annavaram, Trung Diep, and John Shen. A case for shared instruction cache on chip multiprocessors running OLTP. *ACM SIGARCH Computer Architecture News*, 32 (3):11–18, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kane:1974:ISI

[Kan74] Gerald R. Kane. An iteratively structured information processor. *ACM SIGARCH Computer Architecture News*, 3(4):106–112, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kannan:2011:ARH

[Kan11] Ravi Kannan. Algorithms: Recent highlights and challenges. *ACM SIGARCH Computer Architecture News*, 39 (3):??, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kaplan:1987:LLG

[Kap87] Ian Kaplan. The LDF 100: a large grain dataflow parallel processor. *ACM SIGARCH Computer Architecture News*, 15(3):5–12, June 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karger:1989:URO

[Kar89] Paul A. Karger. Using registers to optimize cross-domain call performance. *ACM SIGARCH Computer Architecture News*, 17(2):194–204, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karne:1995:OOC

[Kar95] Ramesh K. Karne. Object-oriented computer architectures for new generation of applications. *ACM SIGARCH Computer Architecture News*, 23(5):8–19, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karger:2007:PSL

[Kar07] Paul A. Karger. Performance and security lessons learned from virtualizing the Alpha processor. *ACM SIGARCH Computer Architecture News*, 35(2):392–401, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Katz:1989:PHP

[Kat89] R. H. Katz. A project on high performance I/O subsystems. *ACM SIGARCH Computer Architecture News*, 17(5):24–31, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1980:SA

[Kav80] Krishna M. Kavi. Semantics of an algorithm. *ACM SIGARCH Computer Architecture News*, 8(7):24–26, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1981:IAC

[Kav81] Krishna M. Kavi. Innovative architectures and commercial computers: a summary of the panel discussion at NCC 1981. *ACM SIGARCH Computer Architecture News*, 9(5): 14–16, August 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kerner:1976:PLL

[KB76] Helmut Kerner and Werner Beyerle. A PMS level language for performance evaluation modelling (V-PMS). *ACM SIGARCH Computer*

Architecture News, 4(4):15–19, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1980:SLC

[KB80] Anshul Kumar and P. C. P. Bhatt. A structured language for CAD of digital systems. *ACM SIGARCH Computer Architecture News*, 8 (3):308–316, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaushal:1992:CHH

[KB92] R. P. Kaushal and J. S. Bedi. Comparison of hypercube, hypernet, and symmetric hypernet architectures. *ACM SIGARCH Computer Architecture News*, 20(5):13–25, December 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1982:HAP

[KBB+82] Krishna Kavi, Boumediene Belkhouche, Evelyn Bullard, Lois Delcambre, and Stephen Nemecek. HLL architectures: Pitfalls and predilections. *ACM SIGARCH Computer Architecture News*, 10(3):18–23, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kubiatowicz:2000:OAG

[KBC+00] John Kubiatowicz, David Bindel, Yan Chen, Steven Czerwinski, Patrick Eaton, Dennis Geels, Ramakrishna Gummadi, Sean Rhea, Hakim Weatherspoon, Chris Wells, and Ben Zhao. OceanStore: an architecture for global-scale persistent storage. *ACM SIGARCH Computer Architecture News*, 28(5):190–201, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kudrow:2013:QRC

[KBD+13] Daniel Kudrow, Kenneth Bier, Zhaoxia Deng, Diana Franklin, Yu Tomita, Kenneth R. Brown, and Frederic T. Chong. Quantum rotations: a case study in static and dynamic machine-code generation for quantum computers. *ACM SIGARCH Computer Architecture News*, 41(3):166–176, June 2013. ICSA '13 conference proceedings.

Kagi:1997:ESL

[KBG97] Alain Kägi, Doug Burger, and James R. Goodman. Efficient synchronization: let them eat QOLB. *ACM SIGARCH Computer Architecture News*, 25(2):170–180, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kateja:2017:VDB

[KBG+17] Rajat Kateja, Anirudh Badam, Sriram Govindan, Bikash Sharma, and Greg Ganger. Viyojit: Decoupling battery and DRAM capacities for battery-backed DRAM. *ACM SIGARCH Computer Architecture News*, 45(2):613–626, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Krashinsky:2004:VTA

[KBH+04] Ronny Krashinsky, Christopher Batten, Mark Hampton, Steve Gerding, Brian Pharris, Jared Casper, and Krste Asanovic. The vector-thread architecture. *ACM SIGARCH Computer Architecture News*, 32(2):52, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2002:ANU

[KBK02] Changkyu Kim, Doug Burger, and Stephen W. Keckler. An adaptive, non-uniform cache structure for wire-delay dominated on-chip caches. *ACM SIGARCH Computer Architecture News*, 30(5):211–222, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kravitz:1989:LSM

[KBR89] S. Kravitz, R. E. Bryant, and R. Rutenbar. Logic simulation on massively parallel architectures. *ACM SIGARCH Computer Architecture News*, 17(3):336–343, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1984:MRD

[KBS84] Krishna M. Kavi, Edward W. Banios, and Bruce D. Shriver. Message repository definitional facility: an architectural model for interprocess communication. *ACM SIGARCH Computer Architecture News*, 12(3):271–278, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

King:1974:ODS

[KC74] Willis K. King and Fulvio Carbonaro. Output devices sharing by minicomputers. *ACM SIGARCH Computer Architecture News*, 3(4):141–145, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Knott:1982:FDA

[KC82] J. D. Knott and T. W. Crockett. Fair dynamic arbitration for a multiprocessor communications bus. *ACM SIGARCH Computer Architecture News*, 10(5):4–9, September 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karamcheti:1995:CAS

[KC95] Vijay Karamcheti and Andrew A. Chien. A comparison of architectural support for messaging in the TMC CM-5 and the Cray T3D. *ACM SIGARCH Computer Architecture News*, 23(2):298–307, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:1996:RCQ

[KC96] Jae H. Kim and Andrew A. Chien. Rotating combined queueing (RCQ): bandwidth and latency guarantees in low-cost, high-performance networks. *ACM SIGARCH Computer Architecture News*, 24(2):226–236, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keen:2002:HSC

[KC02] Diana Keen and Frederic T. Chong. Hardware-software codesign of embedded sensor-actuator networks. *ACM SIGARCH Computer Architecture News*, 30(3):5–6, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaeli:2005:WIS

[KC05] David Kaeli and Robert Cohn. WBIA'05: Introduction to the special issue. *ACM SIGARCH Computer Architecture News*, 33(5):1–2, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Korn:2007:SCS

[KC07] Wendy Korn and Moon S. Chang. SPEC CPU2006 sensitivity to memory page sizes. *ACM SIGARCH Computer Architecture News*, 35(1):97–101, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Krimer:2012:LDI

[KCE12] Evgeni Krimer, Patrick Chiang, and Mattan Erez. Lane decoupling for improving the timing-error resiliency of wide-SIMD architectures. *ACM SIGARCH Computer Architecture News*, 40(3):237–248, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kinsy:2009:AAD

[KCW+09] Michel A. Kinsy, Myong Hyon Cho, Tina Wen, Edward Suh, Marten van Dijk, and Srinivas Devadas. Application-aware deadlock-free oblivious routing. *ACM SIGARCH Computer Architecture News*, 37(3):208–219, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keleher:1992:LRC

[KCZ92] Pete Keleher, Alan L. Cox, and Willy Zwaenepoel. Lazy release consistency for software distributed shared memory. *ACM SIGARCH Computer Architecture News*, 20 (2):13–21, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keckler:1992:PCI

[KD92] Stephem W. Keckler and William J. Dally. Processor coupling: integrating compile time and runtime scheduling for parallelism. *ACM SIGARCH Computer Architecture News*, 20(2):202–213, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khunjush:2006:HMD

[KD06] Farshad Khunjush and Nikitas J. Dimopoulos. Hiding message delivery and reducing memory access latency by providing direct-to-cache transfer during receive operations in a message passing environment. *ACM SIGARCH Computer Architecture News*, 34(1):41–48, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2007:FBC

[KDA07] John Kim, William J. Dally, and Dennis Abts. Flattened butterfly: a cost-efficient topology for high-radix networks. *ACM SIGARCH Computer Architecture News*, 35(2):126–137, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

King:2012:AGH

[KDA12] Myron King, Nirav Dave, and Arvind. Automatic generation of hardware/software interfaces. *ACM SIGARCH Computer Architecture News*, 40(1):325–336, March 2012. ASPLOS '12 conference proceedings.

Korfhage:1978:DPU

[KDBA78] R. R. Korfhage, W. H. E. Day, L. L. Beck, and W. F. Appelbe. Data physics: an unorthodox view of data and its implications in data processors. *ACM SIGARCH Computer Architecture News*, 7(2): 1–7, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1983:SSC

[KDJ83] Manoj Kumar, Daniel M. Dias, and J. R. Jump. Switching strategies in a class of packet switching networks. *ACM SIGARCH Computer Architecture News*, 11(3):284–300, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2014:FBM

[KDK+14] Yoongu Kim, Ross Daly, Jeremie Kim, Chris Fallin, Ji Hye Lee, Donghyuk Lee, Chris Wilkerson, Konrad Lai, and Onur Mutlu. Flipping bits in memory without accessing them: an experimental study of DRAM disturbance errors. *ACM SIGARCH Computer Architecture News*, 42 (3):361–372, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kuck:1993:CSI

[KDL+93] D. Kuck, E. Davidson, D. Lawrie, A. Sameh, C. Q. Zhu, A. Veidenbaum, J. Konicek, P. Yew, K. Gallivan, W. Jalby, H. Wijshoff, R. Bramley, U. M. Yang, P. Emrath, D. Padua, R. Eigenmann, J. Hoeflinger, G. Jaxon, Z. Li, T. Murphy, and J. Andrews. The cedar system and an initial performance study. *ACM SIGARCH Computer Architecture News*, 21(2):213–223, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kuck:1998:CSI

[KDL+98] D. Kuck, E. Davidson, D. Lawrie, A. Sameh, C.-Q. Zhu, A. Veidenbaum, J. Konicek, P. Yew, K. Gallivan, W. Jalby, H. Wijshoff, R. Bramley, U. M. Yang, P. Emrath, D. Padua, R. Eigenmann, J. Hoeflinger, G. Jayson, Z. Li, T. Murphy, and J. Andrews. The Cedar system and an initial performance study. In ACM [ACM98a], pages 462–472. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Kwon:2016:SPT

[KDL+16] Youngjin Kwon, Alan M. Dunn, Michael Z. Lee, Owen S. Hofmann, Yuanzhong Xu, and Emmett Witchel. Sego: Pervasive trusted metadata for efficiently verified untrusted system services. *ACM SIGARCH Computer Architecture News*, 44(2):277–290, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Keckler:1998:EFG

[KDM+98] Stephen W. Keckler, William J. Dally, Daniel Maskit, Nicholas P. Carter, Andrew Chang, and Whay S. Lee. Exploiting fine-grain thread level parallelism on the MIT multi-ALU processor. *ACM SIGARCH Computer Architecture News*, 26(3):306–317, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kechadi:1992:PIV

[KDMP92] M. Tahar Kechadi, J-L. Dekeyser, Ph. Marquet, and Ph. Preux. Performance improvement for vector pipeline multiprocessor systems using a disordered execution model(abstract). *ACM SIGARCH Computer Architecture News*, 20(2):433, May 1992. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2008:PCN

[KDOA08] Martha Mercaldi Kim, John D. Davis, Mark Oskin, and Todd Austin. Polymorphic on-chip networks. *ACM SIGARCH Computer Architecture News*, 36(3):101–112, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kirovski:2002:ETS

[KDP02] Darko Kirovski, Milenko Drinić, and Miodrag Potkonjak. Enabling trusted software integrity. *ACM SIGARCH Computer Architecture News*, 30(5):108–120, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koeplinger:2016:AGE

[KDP^{+}16] David Koeplinger, Christina Delimitrou, Raghu Prabhakar, Christos Kozyrakis, Yaqi Zhang, and Kunle Olukotun. Automatic generation of efficient accelerators for reconfigurable hardware. *ACM SIGARCH Computer Architecture News*, 44 (3):115–127, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kgil:2006:PUS

[KDS^{+}06] Taeho Kgil, Shaun D'Souza, Ali Saidi, Nathan Binkert, Ronald Dreslinski, Trevor Mudge, Steven Reinhardt, and Krisztian Flautner. PicoServer: using 3D stacking technology to enable a compact energy efficient chip multiprocessor. *ACM SIGARCH Computer Architecture News*, 34(5):117–128, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2008:TDH

[KDSA08] John Kim, William J. Dally, Steve Scott, and Dennis Abts. Technology-driven, highly-scalable Dragonfly topology. *ACM SIGARCH Computer Architecture News*, 36(3):77–88, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kakimoto:2012:PCG

[KDSO12] Takeshi Kakimoto, Keisuke Dohi, Yuichiro Shibata, and Kiyoshi Oguri. Performance comparison of GPU programming frameworks with the striped Smith–Waterman algorithm. *ACM SIGARCH Computer Architecture News*, 40(5):70–75, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Kim:2005:MHR

[KDTG05] John Kim, William J. Dally, Brian Towles, and Amit K. Gupta. Microarchitecture of a high-radix router. *ACM SIGARCH Computer Architecture News*, 33(2):420–431, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

K:2011:LPT

[KDV11] Thimmarayaswamy K, Mary M. Dsouza, and G. Varaprasad. Low power techniques for an Android based phone. *ACM SIGARCH Computer Architecture News*, 39(2):26–35, May 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaeli:1991:BHT

[KE91] David R. Kaeli and Philip G. Emma. Branch history table prediction of moving target branches due to subroutine returns. *ACM SIGARCH Computer Architecture News*, 19 (3):34–42, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2016:RMR

[KE16] Dong Wan Kim and Mattan Erez. RelaxFault memory repair. *ACM SIGARCH Computer Architecture News*, 44 (3):645–657, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Keedy:1978:EEU

[Kee78a] J. L. Keedy. On the evaluation of expressions using accumulators, stacks and store-to-store instructions. *ACM SIGARCH Computer Architecture News*, 7(4):24–27, December 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keedy:1978:USE

[Kee78b] J. L. Keedy. On the use of stacks in the evaluation of expressions. *ACM SIGARCH Computer Architecture News*, 6(6):22–28, February 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keedy:1979:MUS

[Kee79a] J. L. Keedy. More on the use of stacks in the evaluation of expressions. *ACM SIGARCH Computer Architecture News*, 7(8):18–22, June 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keedy:1979:TPR

[Kee79b] J. L. Keedy. A technique for passing reference parameters in an information-hiding architecture. *ACM SIGARCH Computer Architecture News*, 7(9):11–15, August 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kehl:1976:BAH

[Keh76] Theodore H. Kehl. Basil architecture — an HLL minicomputer. *ACM SIGARCH Computer Architecture News*, 4(4):

86–92, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koldinger:1991:VTD

[KEL91] Eric J. Koldinger, Susan J. Eggers, and Henry M. Levy. On the validity of trace-driven simulation for multiprocessors. *ACM SIGARCH Computer Architecture News*, 19(3):244–253, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keppel:1991:PIF

[Kep91] David Keppel. A portable interface for on-the-fly instruction space modification. *ACM SIGARCH Computer Architecture News*, 19(2):86–95, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kerr:1974:MPI

[Ker74] Henry D. Kerr. A microprogrammed processor for interactive computer graphics. *ACM SIGARCH Computer Architecture News*, 3(4):28–33, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Katz:1985:ICC

[KEW+85] R. H. Katz, S. J. Eggers, D. A. Wood, C. L. Perkins, and R. G. Sheldon. Implementing a cache consistency protocol. *ACM SIGARCH Computer Architecture News*, 13(3):276–283, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavipurapu:1979:QAU

[KF79] Krishna M. Kavipurapu and Dennis J. Frailey. Quantification of architectures using software science. *ACM SIGARCH Computer Architecture News*, 7(10):2–6, October 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kapauan:1984:PPC

[KFGS84] Alejandro Kapauan, J. Timothy Field, Dennis B. Gannon, and Lawrence Snyder. The Pringle parallel computer. *ACM SIGARCH Computer Architecture News*, 12 (3):12–20, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kgil:2005:CSS

[KFM05] Taeho Kgil, Laura Falk, and Trevor Mudge. ChipLock: support for secure microarchitectures. *ACM SIGARCH Computer Architecture News*, 33(1):134–143, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kondo:2002:SCC

[KFN02] Masaaki Kondo, Motonobu Fujita, and Hiroshi Nakamura. Software-controlled on-chip memory for high-performance and low-power computing. *ACM SIGARCH Computer Architecture News*, 30(3):7–8, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaliorakis:2017:MED

[KGCG17] Manolis Kaliorakis, Dimitris Gizopoulos, Ramon Canal, and Antonio Gonzalez. MeRLiN: Exploiting dynamic instruction behavior for fast and accurate microarchitecture level reliability assessment. *ACM SIGARCH Computer Architecture News*, 45 (2):241–254, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kannan:2017:HDH

[KGGS17] Sudarsun Kannan, Ada Gavrilovska, Vishal Gupta, and Karsten Schwan. HeteroOS: OS design for heterogeneous memory management in datacenter. *ACM SIGARCH Computer Architecture News*, 45 (2):521–534, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kohli:1987:OPP

[KGM87] Madhur Kohli, Mark E. Giuliano, and Jack Minker. An overview of the PRISM project. *ACM SIGARCH Computer Architecture News*, 15(1):35–42, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Knodel:2016:MLR

[KGS16] Oliver Knodel, Paul R. Genssler, and Rainer G. Spallek. Migration of long-running tasks between reconfigurable resources using virtualization. *ACM SIGARCH Computer Architecture News*, 44(4):56–61, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kolli:2017:LLP

[KGS+17] Aasheesh Kolli, Vaibhav Gogte, Ali Saidi, Stephan Diestelhorst, Peter M. Chen, Satish Narayanasamy, and Thomas F. Wenisch. Language-level persistency. *ACM SIGARCH Computer Architecture News*, 45(2):481–493, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Khalid:1995:TDS

[Kha95a] Humayun Khalid. A trace-driven simulation methodology. *ACM SIGARCH Computer Architecture News*, 23 (5):27–33, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1995:URA

[Kha95b] Humayun Khalid. The unconventional replacement algorithms. *ACM SIGARCH Computer Architecture News*, 23(5):20–26, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1997:NCR

[Kha97a] Humayun Khalid. A new cache replacement scheme based on backpropagation neural networks. *ACM SIGARCH Computer Architecture News*, 25(1):27–33, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1997:NTS

[Kha97b] Humayun Khalid. A novel trace sampling technique. *ACM SIGARCH Computer Architecture News*, 25(4):11–16, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1997:PKC

[Kha97c] Humayun Khalid. Performance of the KORA-2 cache replacement scheme. *ACM SIGARCH Computer Architecture News*, 25(4):17–21, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1999:MPE

[Kha99a] Humayun Khalid. A methodology for performance evaluation of systems with large emulation code. *ACM SIGARCH Computer Architecture News*, 27(3):38–42, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1999:PEM

[Kha99b] Humayun Khalid. Performance evaluation of multimedia systems with MPEG-2 bitstreams. *ACM SIGARCH Computer Architecture News*, 27(3):32–37, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1999:PET

[Kha99c] Humayun Khalid. Performance evaluation of two operating systems. *ACM SIGARCH Computer Architecture News*, 27(3):49–52, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khalid:1999:TMB

[Kha99d] Humayun Khalid. Tracing multimedia benchmarks with five degrees of validation. *ACM SIGARCH Computer Architecture News*, 27 (3):43–48, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kodama:2014:PFB

[KHBS14] Yuetsu Kodama, Toshihiro Hanawa, Taisuke Boku, and Mitsuhisa Sato. PEACH2: an FPGA-based PCIe network device for tightly coupled accelerators. *ACM SIGARCH*

Computer Architecture News, 42(4):3–8, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kurian:1992:MLE

[KHC92] Lizyamma Kurian, Paul T. Hulina, and Lee D. Coraor. Memory latency effects in decoupled architectures with a single data memory module. *ACM SIGARCH Computer Architecture News*, 20(2):236–245, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kurian:1991:CPE

[KHCM91] Lizyamma Kurian, Paul T. Hulina, Lee D. Coraor, and Dhamir N. Mannai. Classification and performance evaluation of instruction buffering techniques. *ACM SIGARCH Computer Architecture News*, 19(3):150–159, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kang:2017:NCI

[KHG+17] Yiping Kang, Johann Hauswald, Cao Gao, Austin Rovinski, Trevor Mudge, Jason Mars, and Lingjia Tang. Neurosurgeon: Collaborative intelligence between the cloud and mobile edge. *ACM SIGARCH Computer Architecture News*, 45(1):615–629, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kaxiras:2001:CDE

[KHM01] Stefanos Kaxiras, Zhigang Hu, and Margaret Martonosi. Cache decay: exploiting generational behavior to reduce cache leakage power. *ACM SIGARCH Computer Architecture News*, 29(2):240–251, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:2007:CAS

[KHN07] Sanjeev Kumar, Christopher J. Hughes, and Anthony Nguyen. Carbon: architectural support for fine-grained parallelism on chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 35(2):162–173, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1995:DCM

[KHP+95] Krishna M. Kavi, A. R. Hurson, Phenil Patadia, Elizabeth Abraham, and Ponnarasu Shanmugam. Design of cache memories for multi-threaded dataflow architecture. *ACM SIGARCH Computer Architecture News*, 23(2):253–264, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kontothanassis:1997:VBS

[KHS+97] Leonidas Kontothanassis, Galen Hunt, Robert Stets, Nikolaos Hardavellas, Michał Cierniak, Srinivasan Parthasarathy, Wagner Meira, Jr., Sandhya Dwarkadas, and Michael Scott. VM-based shared memory on low-latency, remote-memory-access networks. *ACM SIGARCH Computer Architecture News*, 25(2):157–169, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2016:SFA

[KIC+16] Donggyu Kim, Adam Izraelevitz, Christopher Celio, Hokeun Kim, Brian Zimmer, Yunsup Lee, Jonathan Bachrach, and Krste Asanović. Strober: fast and accurate sample-based energy simulation for arbitrary RTL. *ACM SIGARCH Computer Architecture News*, 44 (3):128–139, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kieburtz:1987:RAS

[Kie87] Richard B. Kieburtz. A RISC architecture for symbolic computation. *ACM SIGARCH Computer Architecture News*, 15(5):146–155, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

King:1975:CPA

[Kin75] Willis K. King, editor. *Conference Proceedings: 2nd Annual Symposium on Computer Architecture, Houston, Texas, January 20–22, 1975*, volume 3(4) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1975. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN ???? URL `http://portal.acm.org/toc.cfm?id=642089`.

King:1983:RSC

[Kin83] Richard M. King. Research on synthesis of concurrent computing systems (extended abstract). *ACM SIGARCH Computer Architecture News*, 11(3):39–46, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:2006:LLB

[KJC06] Abhas Kumar, Nisheet Jain, and Mainak Chaudhuri. Long-latency branches: how much do they matter? *ACM SIGARCH Computer Architecture News*, 34(3):9–15, June 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kelm:2009:RAS

[KJJ+09] John H. Kelm, Daniel R. Johnson, Matthew R. Johnson, Neal C. Crago, William Tuohy, Aqeel Mahesri, Steven S. Lumetta, Matthew I. Frank, and Sanjay J. Patel. Rigel: an architecture and scalable programming interface for a 1000-core accelerator. *ACM SIGARCH Computer Architecture News*, 37(3):140–151, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kessler:1989:IIS

[KJLH89] R. E. Kessler, R. Jooss, A. Lebeck, and M. D. Hill. Inexpensive implementations of set-associativity. *ACM SIGARCH Computer Architecture News*, 17(3):131–139, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2007:VPR

[KJM+07] Hyesoon Kim, José A. Joao, Onur Mutlu, Chang Joo Lee, Yale N. Patt, and Robert Cohn. VPC prediction: reducing the cost of indirect branches via hardware-based dynamic devirtualization. *ACM SIGARCH Computer Architecture News*, 35(2):424–435, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kharbutli:2006:CEP

[KJS+06] Mazen Kharbutli, Xiaowei Jiang, Yan Solihin, Guru Venkataramani, and Milos Prvulovic. Comprehensively and efficiently protecting the heap. *ACM SIGARCH Computer Architecture News*, 34(5):207–218, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kelm:2010:CHM

[KJT+10] John H. Kelm, Daniel R. Johnson, William Tuohy, Steven S. Lumetta, and Sanjay J. Patel. Cohesion: a hybrid memory model for accelerators. *ACM SIGARCH Computer Architecture News*, 38(3):429–440, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kavi:1984:AQ

[KK84] Krishna M. Kavi and K. Krishnamohan. Architecture quality. *ACM SIGARCH Computer Architecture News*, 12(1):64–72, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kalamatianos:1999:IAI

[KK99] John Kalamatianos and David R. Kaeli. Improving the accuracy of indirect branch prediction via branch classification. *ACM SIGARCH Computer*

Architecture News, 27(1):23–26, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kessler:2008:OCP

[KK08] Christoph W. Kessler and Jörg Keller. Optimized on-chip pipelining of memory-intensive computations on the cell BE. *ACM SIGARCH Computer Architecture News*, 36(5):36–45, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2016:NEN

[KKB+16] Wook-Hee Kim, Jinwoong Kim, Woongki Baek, Beomseok Nam, and Youjip Won. NVWAL: Exploiting NVRAM in write-ahead logging. *ACM SIGARCH Computer Architecture News*, 44(2):385–398, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Keown:1992:PHR

[KKC92] William F. Keown, Jr., Philip Koopman, Jr., and Aaron Collins. Performance of the HARRIS RTX 2000 stack architecture versus the Sun 4 SPARC and the Sun 3 M68020 architectures. *ACM SIGARCH Computer Architecture News*, 20(3):45–52, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2016:SCD

[KKC+16a] Channoh Kim, Sungmin Kim, Hyeon Gyu Cho, Dooyoung Kim, Jaehyeok Kim, Young H. Oh, Hakbeom Jang, and Jae W. Lee. Short-circuit dispatch: accelerating virtual machine interpreters on embedded processors. *ACM SIGARCH Computer Architecture News*, 44 (3):291–303, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kim:2016:NPD

[KKC+16b] Duckhwan Kim, Jaeha Kung, Sek Chai, Sudhakar Yalamanchili, and Saibal Mukhopadhyay. Neurocube: a programmable digital neuromorphic architecture with high-density 3D memory. *ACM SIGARCH Computer Architecture News*, 44(3):380–392, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kurian:2013:LAA

[KKD13] George Kurian, Omer Khan, and Srinivas Devadas. The locality-aware adaptive cache coherence protocol. *ACM SIGARCH Computer Architecture News*, 41(3):523–534, June 2013. ICSA '13 conference proceedings.

Kim:2013:DBC

[KKJ+13] Hwanju Kim, Sangwook Kim, Jinkyu Jeong, Joonwon Lee, and Seungryoul Maeng. Demand-based coordinated scheduling for SMP VMs. *ACM SIGARCH Computer Architecture News*, 41 (1):369–380, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kuznia:1976:SSM

[KKK76] Ch. Kuznia, R. Kober, and H. Kopp. SMS 101 — a structured multi microprocessor system with deadlock-free operation scheme. *ACM SIGARCH Computer Architecture News*, 4(4):122.5, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2017:TAA

[KKK+17] Channoh Kim, Jaehyeok Kim, Sungmin Kim, Dooyoung Kim, Namho Kim, Gitae Na, Young H. Oh, Hyeon Gyu Cho, and Jae W. Lee. Typed architectures: Architectural support for lightweight scripting. *ACM SIGARCH Computer Architecture News*, 45 (1):77–90, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kawahito:2006:NIR

[KKM+06] Motohiro Kawahito, Hideaki Komatsu, Takao Moriyama, Hiroshi Inoue, and Toshio Nakatani. A new idiom recognition framework for exploiting hardware-assist instructions. *ACM SIGARCH Computer Architecture News*, 34 (5):382–393, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kwon:2011:VPA

[KKMH11] Youngjin Kwon, Changdae Kim, Seungryoul Maeng, and Jaehyuk Huh. Virtualizing performance asymmetric multi-core systems. *ACM SIGARCH Computer Architecture News*, 39(3): 45–56, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kawahito:2000:ENP

[KKN00] Motohiro Kawahito, Hideaki Komatsu, and Toshio Nakatani. Effective null pointer check elimination utilizing hardware trap. *ACM SIGARCH Computer Architecture News*, 28 (5):139–149, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kwon:2014:LOC

[KKP14] Woo-Cheol Kwon, Tushar Krishna, and Li-Shiuan Peh. Locality-oblivious cache organization leveraging single-cycle multi-hop NoCs. *ACM*

SIGARCH Computer Architecture News, 42(1):715–728, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kumar:2008:AVO

[KKS+08] Sanjeev Kumar, Daehyun Kim, Mikhail Smelyanskiy, Yen-Kuang Chen, Jatin Chhugani, Christopher J. Hughes, Changkyu Kim, Victor W. Lee, and Anthony D. Nguyen. Atomic vector operations on chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 36(3):441–452, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2015:DEF

[KKS+15] Dohyeong Kim, Yonghwi Kwon, William N. Sumner, Xiangyu Zhang, and Dongyan Xu. Dual execution for on the fly fine grained execution comparison. *ACM SIGARCH Computer Architecture News*, 43(1):325–338, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kwon:2016:LCI

[KKS+16] Yonghwi Kwon, Dohyeong Kim, William Nick Sumner, Kyungtae Kim, Brendan Saltaformaggio, Xiangyu Zhang, and Dongyan Xu. LDX: Causality inference by lightweight dual execution. *ACM SIGARCH Computer Architecture News*, 44(2): 503–515, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kobayashi:2005:LAC

[KKT05] Hiroaki Kobayashi, Isao Kotera, and Hiroyuki Takizawa. Locality analysis to control dynamically way-adaptable caches. *ACM SIGARCH Computer Architecture News*, 33(3):25–32, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Klaiber:1991:ASC

[KL91] Alexander C. Klaiber and Henry M. Levy. An architecture for software-controlled data prefetching. *ACM SIGARCH Computer Architecture News*, 19(3):43–53, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Klaiber:1994:CMP

[KL94] A. C. Klaiber and H. M. Levy. A comparison of message passing and shared memory architectures for data parallel programs. *ACM SIGARCH Computer Architecture News*, 22(2):94–105, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2002:IOD

[KL02] Ilhyun Kim and Mikko H. Lipasti. Implementing optimizations at decode time. *ACM SIGARCH Computer Architecture News*, 30(2):221–232, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2003:HPA

[KL03] Ilhyun Kim and Mikko H. Lipasti. Half-price architecture. *ACM SIGARCH Computer Architecture News*, 31 (2):28–38, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:1994:CRF

[KLC94] J. H. Kim, Z. Liu, and A. A. Chien. Compressionless routing: a framework for adaptive and fault-tolerant routing. *ACM SIGARCH Computer Architecture News*, 22(2):289–300, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:1988:RCB

[KLHJ88] D. W. Kim, G. J. Lipovski, A. Hartmann, and R. Jenevein. Regular CC-banyan networks. *ACM SIGARCH Computer Architecture News*, 16(2):325–332, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Klimovic:2017:RRF

[KLK17] Ana Klimovic, Heiner Litz, and Christos Kozyrakis. ReFlex: Remote flash ≈ local flash. *ACM SIGARCH Computer Architecture News*, 45 (1):345–359, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kung:2017:PHA

[KLKM17] Jaeha Kung, Yun Long, Duckhwan Kim, and Saibal Mukhopadhyay. A programmable hardware accelerator for simulating dynamical systems. *ACM SIGARCH Computer Architecture News*, 45(2):403–415, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Koukoumidis:2011:PC

[KLS+11] Emmanouil Koukoumidis, Dimitrios Lymberopoulos, Karin Strauss, Jie Liu, and Doug Burger. Pocket cloudlets. *ACM SIGARCH Computer Architecture News*, 39(1):171–184, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kluge:1976:TBT

[Klu76] W. E. Kluge. Traversing binary tree structures with shift register memories (recent results). *ACM SIGARCH Computer Architecture News*, 4(4):

121.1, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kodres:1974:DSA

[KM74] Uno R. Kodres and William L. McCracken. Design study of an avionics navigation microcomputer. *ACM SIGARCH Computer Architecture News*, 3(4):99–105, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kirner:1986:DDS

[KM86] Claudio Kirner and Eduardo Marques. Design of a distributed system support based on a centralized parallel bus. *ACM SIGARCH Computer Architecture News*, 14(4):15–26, September 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kirman:2010:PEA

[KM10] Nevin Kirman and José F. Martínez. A power-efficient all-optical on-chip interconnect using wavelength-based oblivious routing. *ACM SIGARCH Computer Architecture News*, 38(1):15–28, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koibuchi:2012:CRS

[KMA+12] Michihiro Koibuchi, Hiroki Matsutani, Hideharu Amano, D. Frank Hsu, and Henri Casanova. A case for random shortcut topologies for HPC interconnects. *ACM SIGARCH Computer Architecture News*, 40(3):177–188, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kiyohara:1993:RCN

[KMC+93] Tokuzo Kiyohara, Scott Mahlke, William Chen, Roger Bringmann, Richard Hank, Sadun Anik, and Wen-Mei Hwu. Register connection: a new approach to adding registers into instruction set architectures. *ACM SIGARCH Computer Architecture News*, 21(2):247–256, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kohler:2002:PLO

[KMC02] Eddie Kohler, Robert Morris, and Benjie Chen. Programming language optimizations for modular router configurations. *ACM SIGARCH Computer Architecture News*, 30 (5):251–263, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kamiya:1985:HPA

[KMI+85] Shigeo Kamiya, Susumu Matsuda, Kazuhide Iwata, Shigeki Shibayama, Hiroshi Sakai, and Kunio Murakami. A hardware pipeline algorithm for relational database operation. *ACM SIGARCH Computer Architecture News*, 13(3):250–257, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kobayashi:2016:HSV

[KMK16] Ryohei Kobayashi, Tomohiro Misono, and Kenji Kise. A high-speed Verilog HDL simulation method using a lightweight translator. *ACM SIGARCH Computer Architecture News*, 44(4):26–31, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kuperman:2016:PR

[KMN+16] Yossi Kuperman, Eyal Moscovici, Joel Nider, Razya Ladelsky, Abel Gordon, and Dan Tsafrir. Paravirtual remote I/O. *ACM SIGARCH Computer Architecture News*, 44 (2):49–65, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kim:2007:AIB

[KMOA07] Martha Mercaldi Kim, Mojtaba Mehrara, Mark Oskin, and Todd Austin. Architectural implications of brick and mortar silicon manufacturing. *ACM SIGARCH Computer Architecture News*, 35(2):244–253, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koka:2010:SPN

[KMS+10] Pranay Koka, Michael O. McCracken, Herb Schwetman, Xuezhe Zheng, Ron Ho, and Ashok V. Krishnamoorthy. Silicon-photonic network architectures for scalable, power-efficient multi-chip systems. *ACM SIGARCH Computer Architecture News*, 38(3):117–128, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koka:2012:MAA

[KMS+12] Pranay Koka, Michael O. McCracken, Herb Schwetman, Chia-Hsin Owen Chen, Xuezhe Zheng, Ron Ho, Kannan Raj, and Ashok V. Krishnamoorthy. A micro-architectural analysis of switched photonic multi-chip interconnects. *ACM SIGARCH Computer Architecture News*, 40 (3):153–164, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kuga:1991:DDH

[KMT91] Morihiro Kuga, Kazuaki Murakami, and Shinji Tomita. DSNS (dynamically-hazard-resolved statically-code-scheduled, nonuniform superscalar): yet another superscalar processor architecture. *ACM SIGARCH*

Computer Architecture News, 19(4):14–29, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:2012:NLT

[KMVS12] Shiv Kumar, Seshadri Krishna Murthy, G. Varaprasad, and S. Sivasathya. Network load and traffic pattern on the capacity of wireless ad hoc networks. *ACM SIGARCH Computer Architecture News*, 40(4):10–25, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Knight:1991:TLL

[Kni91] Thomas F. Knight, Jr. Technologies for low latency interconnection switches. *ACM SIGARCH Computer Architecture News*, 19(1):61–68, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Knoke:1973:SEC

[Kno73] P. J. Knoke. Simulation exercises for computer architecture education. *ACM SIGARCH Computer Architecture News*, 2(4):181–185, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2006:GDE

[KNP06] Jongman Kim, Chrysostomos Nicopoulos, and Dongkook Park. A gracefully degrading and energy-efficient modular router architecture for on-chip networks. *ACM SIGARCH Computer Architecture News*, 34(2):4–15, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2007:NDD

[KNP+07] Jongman Kim, Chrysostomos Nicopoulos, Dongkook Park, Reetuparna Das, Yuan Xie, Vijaykrishnan Narayanan, Mazin S. Yousif, and Chita R. Das. A novel dimensionally-decomposed router for on-chip communication in 3D architectures. *ACM SIGARCH Computer Architecture News*, 35(2):138–149, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kyo:2005:IMA

[KOA05] Shorin Kyo, Shin'ichiro Okazaki, and Tamio Arai. An integrated memory array processor architecture for embedded image recognition systems. *ACM SIGARCH Computer Architecture News*, 33(2):134–145, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kayaalp:2012:BRL

[KOAGP12] Mehmet Kayaalp, Meltem Ozsoy, Nael Abu-Ghazaleh, and Dmitry Ponomarev. Branch regulation: low-overhead protection from code reuse attacks. *ACM SIGARCH Com-*

puter Architecture News, 40 (3):94–105, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kogge:1988:VRB

[KOBS88] Peter Kogge, John Oldfield, Mark Brule, and Charles Stormon. VLSI and rule-based systems. *ACM SIGARCH Computer Architecture News*, 16(5):52–65, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kogge:1973:MRP

[Kog73] Peter M. Kogge. Maximal rate pipelined solutions to recurrence problems. *ACM SIGARCH Computer Architecture News*, 2(4):71–76, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kogge:1977:MPP

[Kog77] Peter M. Kogge. The microprogramming of pipelined processors. *ACM SIGARCH Computer Architecture News*, 5(7):63–69, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kuskin:1994:SFM

[KOH+94] J. Kuskin, D. Ofelt, M. Heinrich, J. Heinlein, R. Simoni, K. Gharachorloo, J. Chapin, D. Nakahira, J. Baxter, M. Horowitz, A. Gupta, M. Rosenblum, and J. Hennessy. The Stanford FLASH multiprocessor. *ACM SIGARCH Computer Architecture News*, 22(2):302–313, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kuskin:1998:SFM

[KOH+98] Jeffrey Kuskin, David Ofelt, Mark Heinrich, John Heinlein, Richard Simoni, K. Gharachorloo, J. Chapin, D. Nakahira, J. Baxter, M. Horowitz, A. Gupta, M. Rosenblum, and J. Hennessy. The Stanford FLASH multiprocessor. In ACM [ACM98a], pages 485–496. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Kamibayashi:1982:HOS

[KONA82] N. Kamibayashi, H. Ogawana, K. Nagayama, and H. Aiso. Heart: an operating system nucleus machine implemented by firmware. *ACM SIGARCH Computer Architecture News*, 10(2):195–204, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kornerup:1974:CMS

[Kor74] Peter Kornerup. Concepts of the MATHILDA system. *ACM SIGARCH Computer Architecture News*, 3(4):159–164, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Koo:2017:APA

[KORA17] Gunjae Koo, Yunho Oh, Won Woo Ro, and Murali Annavaram. Access pattern-aware cache management for improving data utilization in GPU. *ACM SIGARCH Computer Architecture News*, 45 (2):307–319, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kozyrakis:2003:OLC

[KP03] Christos Kozyrakis and David Patterson. Overcoming the limitations of conventional vector processors. *ACM SIGARCH Computer Architecture News*, 31(2):399–409, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:2005:TDD

[KP05] Naveen Kumar and Ramesh Peri. Transparent debugging of dynamically instrumented programs. *ACM SIGARCH Computer Architecture News*, 33(5):57–62, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Klauser:1998:SEE

[KPG98] Artur Klauser, Abhijit Paithankar, and Dirk Grunwald. Selective eager execution on the PolyPath architecture. *ACM SIGARCH Computer Architecture News*, 26(3):250–259, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kwon:1996:COR

[KPH96] Oh-Young Kwon, Gi-Ho Park, and Tack-Don Han. A compiler optimization to reduce execution time of loop nest. *ACM SIGARCH Computer Architecture News*, 24(1):6–11, March 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keeton:1998:PCQ

[KPH+98] Kimberly Keeton, David A. Patterson, Yong Qiang He, Roger C. Raphael, and Walter E. Baker. Performance characterization of a Quad Pentium Pro SMP using OLTP workloads. *ACM SIGARCH Computer Architecture News*, 26(3):15–26, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:1989:PLS

[KPK89] K. Kim and V. K. Prasanna-Kumar. Perfect Latin squares and parallel array access. *ACM SIGARCH Computer Architecture News*, 17(3):372–379, June 1989. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Klappholz:1990:PAA

[KPK90] David Klappholz, Kleanthis Psarris, and Xiangyun Kong. On the perfect accuracy of an approximate subscript analysis test. *ACM SIGARCH Computer Architecture News*, 18(3b):201–212, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:2007:EVC

[KPKJ07] Amit Kumar, Li-Shiuan Peh, Partha Kundu, and Niraj K. Jha. Express virtual channels: towards the ideal interconnection fabric. *ACM SIGARCH Computer Architecture News*, 35(2):150–161, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kulkarni:2008:OPB

[KPR+08] Milind Kulkarni, Keshav Pingali, Ganesh Ramanarayanan, Bruce Walter, Kavita Bala, and L. Paul Chew. Optimistic parallelism benefits from data partitioning. *ACM SIGARCH Computer Architecture News*, 36(1):233–243, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaufmann:2016:HPP

[KPS+16a] Antoine Kaufmann, SImon Peter, Naveen Kr. Sharma, Thomas Anderson, and Arvind Krishnamurthy. High performance packet processing with FlexNIC. *ACM SIGARCH Computer Architecture News*, 44(2):67–81, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kolli:2016:HPT

[KPS+16b] Aasheesh Kolli, Steven Pelley, Ali Saidi, Peter M. Chen, and Thomas F. Wenisch. High-performance transactions for persistent memories. *ACM SIGARCH Computer Architecture News*, 44(2):399–411, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kuhl:1980:DFT

[KR80] J. G. Kuhl and S. M. Reddy. Distributed fault-tolerance for large multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 8(3):23–30, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1985:APM

[KR85a] V. K. Prasanna Kumar and C. S. Raghavendra. Array processor with multiple broadcasting. *ACM SIGARCH Computer Architecture News*, 13(3):2–10, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1985:DAF

[KR85b] V. P. Kumar and S. M. Reddy. Design and analysis of fault-tolerant multistage interconnection networks with low link complexity. *ACM SIGARCH Computer Architecture News*, 13(3):376–386, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kaxiras:2013:NPE

[KR13] Stefanos Kaxiras and Alberto Ros. A new perspective for efficient virtual-cache coherence. *ACM SIGARCH Computer Architecture News*, 41 (3):535–546, June 2013. ICSA '13 conference proceedings.

Krieger:1991:BRM

[Kri91] Moshe Krieger. Book review: *Multiprocessors* by D. Tabak (Prentice-Hall, 1990). *ACM SIGARCH Computer Architecture News*, 19(5):27–29, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Krishnan:1983:ESC

[KRM83] R. Kalyana Krishnan, A. K. Rajasekar, and C. S. Moghe. An experimental system for Computer Science instruction. *ACM SIGARCH Computer Architecture News*, 11(3):222–227, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kgil:2008:INF

[KRM08] Taeho Kgil, David Roberts, and Trevor Mudge. Improving NAND flash based disk caches. *ACM SIGARCH Computer Architecture News*, 36(3):327–338, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kronlof:1983:ECM

[Kro83] Klaus Kronlöf. Execution control and memory management of a Data Flow Signal Processor. *ACM SIGARCH Computer Architecture News*, 11(3):230–235, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kroft:1998:LFI

[Kro98a] David Kroft. Lockup-free instruction fetch/prefetch cache organization. In ACM [ACM98a], pages 195–201. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Kroft:1998:RLF

[Kro98b] David Kroft. Retrospective: Lockup-free instruction fetch/

prefetch cache organization. In ACM [ACM98a], pages 20–21. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Kadav:2013:FGF

[KRS13] Asim Kadav, Matthew J. Renzelmann, and Michael M. Swift. Fine-grained fault tolerance using device checkpoints. *ACM SIGARCH Computer Architecture News*, 41 (1):473–484, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kawakami:1984:SPL

[KS84a] Katsura Kawakami and Shigeo Shimazaki. A special purpose LSI processor using the DDA algorithm for image transformation. *ACM SIGARCH Computer Architecture News*, 12(3):48–54, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kruskal:1984:IBS

[KS84b] Clyde P. Kruskal and Marc Snir. The importance of being square. *ACM SIGARCH Computer Architecture News*, 12(3):91–98, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kunkel:1986:OPS

[KS86] S. R. Kunkel and J. E. Smith. Optimal pipelining in supercomputers. *ACM SIGARCH Computer Architecture News*, 14(2):404–411, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Konstantinidou:1991:CRP

[KS91a] S. Konstantinidou and L. Snyder. The chaos router: a practical application of randomization in network routing. *ACM SIGARCH Computer Architecture News*, 19(1):79–88, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Konstantinidou:1991:CRA

[KS91b] S. Konstantinidou and L. Snyder. Chaos router: architecture and performance. *ACM SIGARCH Computer Architecture News*, 19(3):212–221, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kontothanassis:1995:ESM

[KS95] Leonidas I. Kontothanassis and Michael L. Scott. Efficient shared memory with minimal hardware support. *ACM SIGARCH Computer*

Architecture News, 23(4):29–35, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:1999:AEA

[KS99] Seongwoo Kim and Arun K. Somani. Area efficient architectures for information integrity in cache memories. *ACM SIGARCH Computer Architecture News*, 27(2):246–255, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kandiraju:2002:GDT

[KS02a] Gokul B. Kandiraju and Anand Sivasubramaniam. Going the distance for TLB prefetching: an application-driven study. *ACM SIGARCH Computer Architecture News*, 30(2):195–206, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2002:ISM

[KS02b] Ho-Seop Kim and James E. Smith. An instruction set and microarchitecture for instruction level distributed processing. *ACM SIGARCH Computer Architecture News*, 30 (2):71–81, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karkhanis:2004:FOS

[KS04] Tejas S. Karkhanis and James E. Smith. A first-order superscalar processor model. *ACM SIGARCH Computer Architecture News*, 32 (2):338, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Karkhanis:2007:ADA

[KS07] Tejas S. Karkhanis and James E. Smith. Automated design of application specific superscalar processors: an analytical approach. *ACM SIGARCH Computer Architecture News*, 35(2):402–411, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kadav:2012:UMD

[KS12] Asim Kadav and Michael M. Swift. Understanding modern device drivers. *ACM SIGARCH Computer Architecture News*, 40(1):87–98, March 2012. ASPLOS '12 conference proceedings.

Kasture:2014:UEC

[KS14] Harshad Kasture and Daniel Sanchez. Ubik: efficient cache sharing with strict QoS for latency-critical workloads. *ACM SIGARCH Computer Architecture News*, 42(1):729–742, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Koushiro:2003:TLV

[KSA03] Takenori Koushiro, Toshinori Sato, and Itsujiro Arita.

A trace-level value predictor for Contrail processors. *ACM SIGARCH Computer Architecture News*, 31(3):42–47, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2016:BPC

[KSCE16] Jungrae Kim, Michael Sullivan, Esha Choukse, and Mattan Erez. Bit-plane compression: transforming data for better compression in many-core architectures. *ACM SIGARCH Computer Architecture News*, 44 (3):329–340, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kotra:2017:HSC

[KSCK17] Jagadish B. Kotra, Narges Shahidi, Zeshan A. Chishti, and Mahmut T. Kandemir. Hardware-software co-design to mitigate DRAM refresh overheads: a case for refresh-aware process scheduling. *ACM SIGARCH Computer Architecture News*, 45(1):723–736, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kodi:2008:IIR

[KSL08] Avinash Karanth Kodi, Ashwini Sarathy, and Ahmed Louri. iDEAL: Inter-router dual-function energy and area-efficient links for network-on-chip (NoC) architectures. *ACM SIGARCH Computer Architecture News*, 36(3):241–250, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2012:CES

[KSL+12] Yoongu Kim, Vivek Seshadri, Donghyuk Lee, Jamie Liu, and Onur Mutlu. A case for exploiting subarray-level parallelism (SALP) in DRAM. *ACM SIGARCH Computer Architecture News*, 40(3): 368–379, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kim:2016:AIE

[KSLE16] Jungrae Kim, Michael Sullivan, Sangkug Lym, and Mattan Erez. All-inclusive ECC: thorough end-to-end protection for reliable computer memory. *ACM SIGARCH Computer Architecture News*, 44(3):622–633, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kise:2007:SIA

[KSN07a] Kenji Kise, Toshinori Sato, and Hironori Nakajo. Special issue: ALPS'07 – Advanced Low Power Systems: Introduction. *ACM SIGARCH Computer Architecture News*, 35(5):1–2, December 2007. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Kondo:2007:IFT

[KSN07b] Masaaki Kondo, Hiroshi Sasaki, and Hiroshi Nakamura. Improving fairness, throughput and energy-efficiency on a chip multiprocessor through DVFS. *ACM SIGARCH Computer Architecture News*, 35(1):31–38, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kreger-Stickles:2008:MAI

[KSO08] Lucas Kreger-Stickles and Mark Oskin. Microcoded architectures for ion-tap quantum computers. *ACM SIGARCH Computer Architecture News*, 36(3):165–176, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Keller:2010:NVC

[KSRL10] Eric Keller, Jakub Szefer, Jennifer Rexford, and Ruby B. Lee. NoHype: virtualized cloud infrastructure without the virtualization. *ACM SIGARCH Computer Architecture News*, 38(3):350–361, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kodama:1995:EXP

[KSS+95] Yuetsu Kodama, Hirohumi Sakane, Mitsuhisa Sato, Hayato Yamana, Shuichi Sakai, and Yoshinori Yamaguchi. The EM-X parallel computer: architecture and basic performance. *ACM SIGARCH Computer Architecture News*, 23(2):14–23, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kamruzzaman:2011:ICP

[KST11] Md Kamruzzaman, Steven Swanson, and Dean M. Tullsen. Inter-core prefetching for multicore processors using migrating helper threads. *ACM SIGARCH Computer Architecture News*, 39(1):393–404, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yu:2011:SDH

[kSYHX+11] Wing kei S. Yu, Ruirui Huang, Sarah Q. Xu, Sung-En Wang, Edwin Kan, and G. Edward Suh. SRAM–DRAM hybrid memory with applications to efficient register files in fine-grained multithreading. *ACM SIGARCH Computer Architecture News*, 39(3):247–258, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Katevenis:1991:RBP

[KT91] Manolis Katevenis and Nestoras Tzartzanis. Reducing the branch penalty by rearranging instructions in a double-width memory. *ACM SIGARCH*

Computer Architecture News, 19(2):15–27, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kreaseck:2000:LTB

[KTC00] Barbara Kreaseck, Dean Tullsen, and Brad Calder. Limits of task-based parallelism in irregular applications. *ACM SIGARCH Computer Architecture News*, 28 (1):20, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2017:KPC

[KTG+17] Jinchun Kim, Elvira Teran, Paul V. Gratz, Daniel A. Jiménez, Seth H. Pugsley, and Chris Wilkerson. Kill the program counter: Reconstructing program behavior in the processor cache hierarchy. *ACM SIGARCH Computer Architecture News*, 45 (1):737–749, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kondo:1986:PMA

[KTK+86] T. Kondo, T. Tsuchiya, T. Kitamura, Y. Sugiyama, and T. Kimura. Pseudo MIMD array processor—AAP2. *ACM SIGARCH Computer Architecture News*, 14(2):330–337, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kambadur:2012:HCA

[KTK12] Melanie Kambadur, Kui Tang, and Martha A. Kim. Harmony: collection and analysis of parallel block vectors. *ACM SIGARCH Computer Architecture News*, 40 (3):452–463, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kagimasa:1991:ASM

[KTMY91] Toyohiko Kagimasa, Kikuo Takahashi, Toshiaki Mori, and Seiichi Yoshizumi. Adaptive storage management for very large virtual/real storage systems. *ACM SIGARCH Computer Architecture News*, 19(3):372–379, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kinoshita:2012:ARS

[KTO+12] Kei Kinoshita, Daisuke Takano, Tomoyuki Okamura, Tetsuhiko Yao, and Yoshiki Yamaguchi. An augmented reality system with a coarse-grained reconfigurable device. *ACM SIGARCH Computer Architecture News*, 40(5):16–21, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Kumar:2004:SIH

[KTR+04] Rakesh Kumar, Dean M. Tullsen, Parthasarathy Ranganathan, Norman P. Jouppi, and Keith I. Farkas. Single-ISA heterogeneous multi-core architectures for multithreaded workload performance. *ACM SIGARCH Computer Architecture News*, 32(2):64, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kim:2013:MME

[KTS+13] Ji Kim, Christopher Torng, Shreesha Srinath, Derek Lockhart, and Christopher Batten. Microarchitectural mechanisms to exploit value structure in SIMT architectures. *ACM SIGARCH Computer Architecture News*, 41(3):130–141, June 2013. ICSA '13 conference proceedings.

Kuhn:1980:EMA

[Kuh80] Robert H. Kuhn. Efficient mapping of algorithms to single-stage interconnections. *ACM SIGARCH Computer Architecture News*, 8(3):182–189, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1987:ESA

[Kum87] M. Kumar. Effect of storage allocation/reclamation methods on parallelism and storage requirements. *ACM SIGARCH Computer Architecture News*, 15(2):197–205, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kung:1986:MRB

[Kun86] H. T. Kung. Memory requirements for balanced computer architectures. *ACM SIGARCH Computer Architecture News*, 14(2):49–54, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kung:1988:DAS

[Kun88] H. T. Kung. Deadlock avoidance for systolic communication. *ACM SIGARCH Computer Architecture News*, 16(2):252–260, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kuskin:1998:RSF

[Kus98] Jeffrey S. Kuskin. Retrospective: The Stanford FLASH multiprocessor. In ACM [ACM98a], pages 95–97. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

King:1984:CSA

[KW84] Richard M. King and Robert A. Wagner. Combining speed with alpha-particle induced memory, error tolerance in a large Boolean vector machine. *ACM SIGARCH Computer Architecture News*, 12(3):251–253, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kumar:1998:ESL

[KW98] Sanjeev Kumar and Christopher Wilkerson. Exploiting spatial locality in data caches using spatial footprints. *ACM SIGARCH Computer Architecture News*, 26(3):357–368, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kubota:2011:MWS

[KW11] Shinya Kubota and Minoru Watanabe. A MEMS writer system embedded for a programmable optically reconfigurable gate array. *ACM SIGARCH Computer Architecture News*, 39(4):94–97, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kang:2013:HPP

[KW13] Hui Kang and Jennifer L. Wong. To hardware prefetch or not to prefetch?: a virtualized environment study and core binding approach. *ACM SIGARCH Computer Architecture News*, 41(1):357–368, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Karne:2008:OSC

[KWF08] Ramesh K. Karne, Alexander L. Wijesinha, and George H. Ford, Jr. Opinion: stay on course with an evolution or choose a revolution in computing. *ACM SIGARCH Computer Architecture News*, 36(4):1–6, September 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khatamifard:2017:TTA

[KWY+17] S. Karen Khatamifard, Longfei Wang, Weize Yu, Selçuk Köse, and Ulya R. Karpuzcu. ThermoGater: Thermally-aware on-chip voltage regulation. *ACM SIGARCH Computer Architecture News*, 45 (2):120–132, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kanev:2017:MAM

[KXWB17] Svilen Kanev, Sam Likun Xi, Gu-Yeon Wei, and David Brooks. Mallacc: Accelerating memory allocation. *ACM SIGARCH Computer Architecture News*, 45(1): 33–45, March 2017. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Kim:2002:DEC

[KY02] Dongkeun Kim and Donald Yeung. Design and evaluation of compiler algorithms for pre-execution. *ACM SIGARCH Computer Architecture News*, 30(5):159–170, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kishi:1983:DDD

[KYK83] Masasuke Kishi, Hiroshi Yasuhara, and Yasusuke Kawamura. DDDP—a Distributed Data Driven Processor. *ACM SIGARCH Computer Architecture News*, 11(3):236–242, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Kontorinis:2012:MDU

[KZA+12] Vasileios Kontorinis, Liuyi Eric Zhang, Baris Aksanli, Jack Sampson, Houman Homayoun, Eddie Pettis, Dean M. Tullsen, and Tajana Simunic Rosing. Managing distributed UPS energy for effective power capping in data centers. *ACM SIGARCH Computer Architecture News*, 40(3):488–499, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Kasikci:2012:DRV

[KZC12] Baris Kasikci, Cristian Zamfir, and George Candea. Data races vs. data race bugs: telling the difference with Portend. *ACM SIGARCH Computer Architecture News*, 40 (1):185–198, March 2012. ASPLOS '12 conference proceedings.

Kumar:2005:IMC

[KZT05] Rakesh Kumar, Victor Zyuban, and Dean M. Tullsen. Interconnections in multi-core architectures: Understanding mechanisms, overheads and scaling. *ACM SIGARCH Computer Architecture News*, 33(2):408–419, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Khazraee:2017:MNO

[KZVT17] Moein Khazraee, Lu Zhang, Luis Vega, and Michael Bedford Taylor. Moonwalk: NRE optimization in ASIC clouds. *ACM SIGARCH Computer Architecture News*, 45(1):511–526, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:2011:ETB

[LAB+11] Yunsup Lee, Rimas Avizienis, Alex Bishara, Richard Xia, Derek Lockhart, Christopher Batten, and Krste Asanović. Exploring the tradeoffs between programmability and efficiency in data-parallel accelerators. *ACM SIGARCH Computer Architecture News*, 39(3):129–140, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Li:2008:OEA

[LABR08] Xiaodong Li, Sarita V. Adve, Pradip Bose, and Jude A. Rivers. Online estimation of architectural vulnerability factor for soft errors. *ACM SIGARCH Computer Architecture News*, 36(3):341–352, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lafitte:1995:SDH

[Laf95] Jean-Louis Lafitte. On structured data handling in parallel processing. *ACM SIGARCH Computer Architecture News*, 23(3):11–18, June 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lafitte:1998:GMD

[Laf98] Jean-Louis Lafitte. A generalized mapping device to help memory latency. *ACM SIGARCH Computer Architecture News*, 26(5):7–13, December 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lafitte:2000:RDH

[Laf00] Jean-Louis Lafitte. Regarding a device to help battering the RAM wall. *ACM SIGARCH Computer Architecture News*, 28(4):4–10, September 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lafitte:2003:QMC

[Laf03] Jean-Louis Lafitte. Qualitatively matching computer architecture with Turing machine. *ACM SIGARCH Computer Architecture News*, 31 (3):33–41, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lafitte:2004:YLL

[Laf04] Jean-Louis Lafitte. 40 years later ... a new engine to handle an operating system infrastructure. *ACM SIGARCH Computer Architecture News*, 32(4):15–22, September 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laird:1992:CTC

[Lai92] Michael Laird. A comparison of three current superscalar designs. *ACM SIGARCH Computer Architecture News*, 20(3):14–21, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lenharth:2009:RDO

[LAK09] Andrew Lenharth, Vikram S. Adve, and Samuel T. King. Recovery domains: an organizing principle for recoverable operating systems. *ACM SIGARCH Computer Architecture News*, 37(1): 49–60, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Laliotis:1973:IAS

[Lal73] T. A. Laliotis. Implementation aspects of the symbol hardware compiler. *ACM SIGARCH Computer Architecture News*, 2(4):111–115, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lampson:1982:FPC

[Lam82] Butler W. Lampson. Fast procedure calls. *ACM SIGARCH Computer Architecture News*, 10(2):66–76, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Langdon:1976:BRR

[Lan76] Glen G. Langdon. Book reviews: Review of *Introduction to Computer Architecture* by Harold S. Stone. *ACM SIGARCH Computer Architecture News*, 5(2):17–19, June 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Langdon:1977:CFM

[Lan77] Glen G. Langdon. Considerations on the "figure of merit" technique for storage hierarchy design. *ACM SIGARCH Computer Architecture News*, 5(6):25–28, February 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Langdon:1990:BRH

[Lan90a] Glen G. Langdon, Jr. Book review: *Highly Parallel Computing* by George Almasi and Allan Gotlieb (Benjamin/Cummings, 1989). *ACM SIGARCH Computer Architecture News*, 18(4):90, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Langdon:1990:BRS

[Lan90b] Glen G. Langdon, Jr. Book review: *Solving Problems on Concurrent Processors, Vol II: Software for Concurrent Processors* by I. Angus, G. Fox, J. Kim, and D. Walker (Prentice-Hall, 1990). *ACM SIGARCH Computer Architecture News*, 18(4):90–91, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Langdon:1993:BR

[Lan93] Glen Langdon. Book reviews. *ACM SIGARCH Computer Architecture News*, 21(4):29, September 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laplante:1990:NSI

[Lap90] P. A. Laplante. A novel single instruction computer architecture. *ACM SIGARCH Computer Architecture News*, 18(4):22–26, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laplante:1991:ICB

[Lap91] P. A. Laplante. An improved conditional branching scheme for a single instruction computer architecture. *ACM SIGARCH Computer Architecture News*, 19(4):66–68, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Larus:1982:CMA

[Lar82] James R. Larus. A comparison of microcode, assembly code, and high-level languages on the VAX-11 and RISC I. *ACM SIGARCH Computer Architecture News*, 10(5):10–15, September 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Larus:2011:CWC

[Lar11] James R. Larus. The cloud will change everything. *ACM SIGARCH Computer Architecture News*, 39(1):1–2, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:1985:TRS

[LAS85] Zhiyuan Li and Walid Abu-Sufah. A technique for reducing synchronization overhead in large scale multiprocessors. *ACM SIGARCH Computer Architecture News*, 13(3):284–291, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1987:WCC

[Las87] Stanley Lass. Wide channel computers. *ACM SIGARCH Computer Architecture News*, 15(3):13–16, June 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1988:MIO

[Las88a] Stanley Lass. Multiple instructions/operands per access to cache memory. *ACM SIGARCH Computer Architecture News*, 16(1):103, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1988:SCM

[Las88b] Stanley Lass. Shared cache multiprocessing with pack computers. *ACM SIGARCH Computer Architecture News*, 16(3):64–70, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1989:HES

[Las89a] S. Lass. On hardware enhanced 80386 software emulation, compiled emulation, a program distribution language, and pack computers. *ACM SIGARCH Computer*

Architecture News, 17(5):116–118, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1989:SIC

[Las89b] Stanley E. Lass. Some innovations in computer architecture. *ACM SIGARCH Computer Architecture News*, 17(1):73–77, March 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lass:1991:CCP

[Las91] Stanley E. Lass. The compiler controlled pack cache and messaging. *ACM SIGARCH Computer Architecture News*, 19(4):80–85, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Leverich:2007:CMS

[LAS+07] Jacob Leverich, Hideho Arakida, Alex Solomatnikov, Amin Firoozshahian, Mark Horowitz, and Christos Kozyrakis. Comparing memory systems for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 35(2):358–368, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laudon:2005:PWN

[Lau05] James Laudon. Performance/watt: the new server focus. *ACM SIGARCH Computer Architecture News*, 33(4):5–13, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lawson:1976:FDC

[Law76] Harold W. Lawson, Jr. Function distribution in computer system architectures. *ACM SIGARCH Computer Architecture News*, 4(4):93–97, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2006:AER

[LB06] Benjamin C. Lee and David M. Brooks. Accurate and efficient regression modeling for microarchitectural performance and power prediction. *ACM SIGARCH Computer Architecture News*, 34(5):185–194, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2008:ETL

[LB08] Benjamin C. Lee and David Brooks. Efficiency trends and limits from comprehensive microarchitectural adaptivity. *ACM SIGARCH Computer Architecture News*, 36(1):36–47, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2017:MVN

[LB17] Doowon Lee and Valeria Bertacco. MTraceCheck: Validating non-deterministic behavior of memory consistency models in post-silicon validation. *ACM SIGARCH Computer Architecture News*, 45 (2):201–213, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:1995:ICF

[LBCG95] Dennis Lee, Jean-Loup Baer, Brad Calder, and Dirk Grunwald. Instruction cache fetch policies for speculative execution. *ACM SIGARCH Computer Architecture News*, 23(2):357–367, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lo:1998:ADW

[LBE+98] Jack L. Lo, Luiz André Barroso, Susan J. Eggers, Kourosh Gharachorloo, Henry M. Levy, and Sujay S. Parekh. An analysis of database workload performance on simultaneous multithreaded processors. *ACM SIGARCH Computer Architecture News*, 26 (3):39–50, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ling:2012:HPP

[LBH12] Cheng Ling, Khaled Benkrid, and Tsuyoshi Hamada. High performance phylogenetic analysis on CUDA-compatible GPUs. *ACM SIGARCH Computer Architecture News*, 40 (5):52–57, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Lewis:2002:AIM

[LBL02] Jarrod A. Lewis, Bryan Black, and Mikko H. Lipasti. Avoiding initialization misses to the heap. *ACM SIGARCH Computer Architecture News*, 30(2):183–194, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2006:MEM

[LBvH06] Xin Li, Marian Boldt, and Reinhard von Hanxleden. Mapping Esterel onto a multithreaded embedded processor. *ACM SIGARCH Computer Architecture News*, 34(5):303–314, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Levy:1982:UBM

[LC82] Henry M. Levy and Douglas W. Clark. On the use of benchmarks for measuring system performance. *ACM SIGARCH Computer Architecture News*, 10(6):5–8, December 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lovett:1996:SCN

[LC96] Tom Lovett and Russell Clapp. STiNG: a CC-NUMA computer system for the commercial marketplace. *ACM*

SIGARCH Computer Architecture News, 24(2):308–317, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Levis:2002:MTV

[LC02] Philip Levis and David Culler. Maté: a tiny virtual machine for sensor networks. *ACM SIGARCH Computer Architecture News*, 30(5):85–95, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lucia:2013:CEF

[LC13] Brandon Lucia and Luis Ceze. Cooperative empirical failure avoidance for multithreaded programs. *ACM SIGARCH Computer Architecture News*, 41(1):39–50, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:1998:ECD

[LCB+98] Dennis C. Lee, Patrick J. Crowley, Jean-Loup Baer, Thomas E. Anderson, and Brian N. Bershad. Execution characteristics of desktop applications on Windows NT. *ACM SIGARCH Computer Architecture News*, 26 (3):27–38, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lai:1992:EBS

[LcC92] Feipei Lai and Meng chou Chang. Enhancing boosting with semantic register in a superscalar processor (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):430, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2017:SSA

[LCCZ17] Kaiwei Li, Jianfei Chen, Wenguang Chen, and Jun Zhu. SaberLDA: Sparsity-aware learning of topic models on GPUs. *ACM SIGARCH Computer Architecture News*, 45(1):497–509, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lie:2001:SME

[LCED01] David Lie, Andy Chou, Dawson Engler, and David L. Dill. A simple method for extracting models for protocol code. *ACM SIGARCH Computer Architecture News*, 29(2):192–203, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Litz:2014:STR

[LCF+14] Heiner Litz, David Cheriton, Amin Firoozshahian, Omid Azizi, and John P. Stevenson. SI-TM: reducing transactional memory abort rates through snapshot isolation. *ACM SIGARCH Computer Architecture News*, 42(1):383–398, March 2014. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Lo:2014:TEP

[LCG+14] David Lo, Liqun Cheng, Rama Govindaraju, Luiz André Barroso, and Christos Kozyrakis. Towards energy proportionality for large-scale latency-critical workloads. *ACM SIGARCH Computer Architecture News*, 42(3):301–312, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Liu:2015:PPM

[LCL+15] Daofu Liu, Tianshi Chen, Shaoli Liu, Jinhong Zhou, Shengyuan Zhou, Olivier Teman, Xiaobing Feng, Xuehai Zhou, and Yunji Chen. PuDianNao: a polyvalent machine learning accelerator. *ACM SIGARCH Computer Architecture News*, 43 (1):369–381, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2016:SKT

[LCL+16] Xiaofeng Lin, Yu Chen, Xiaodong Li, Junjie Mao, Jiaquan He, Wei Xu, and Yuanchun Shi. Scalable kernel TCP design and implementation for short-lived connections. *ACM SIGARCH Computer Architecture News*, 44 (2):339–352, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lim:2009:DME

[LCM+09] Kevin Lim, Jichuan Chang, Trevor Mudge, Parthasarathy Ranganathan, Steven K. Reinhardt, and Thomas F. Wenisch. Disaggregated memory for expansion and sharing in blade servers. *ACM SIGARCH Computer Architecture News*, 37(3):267–278, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lucia:2010:CAS

[LCS10a] Brandon Lucia, Luis Ceze, and Karin Strauss. ColorSafe: architectural support for debugging and dynamically avoiding multi-variable atomicity violations. *ACM SIGARCH Computer Architecture News*, 38(3):222–233, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lucia:2010:CES

[LCS+10b] Brandon Lucia, Luis Ceze, Karin Strauss, Shaz Qadeer, and Hans-J. Boehm. Conflict exceptions: simplifying concurrent language semantics with precise hardware exceptions for data-races. *ACM SIGARCH Computer Architecture News*, 38(3):210–221, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Linderman:2008:MPM

[LCWM08] Michael D. Linderman, Jamison D. Collins, Hong Wang, and Teresa H. Meng. Merge: a programming model for heterogeneous multi-core systems. *ACM SIGARCH Computer Architecture News*, 36 (1):287–296, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2014:SRJ

[LDK14] Yanpei Liu, Stark C. Draper, and Nam Sung Kim. SleepScale: runtime joint speed scaling and sleep states management for power efficient data centers. *ACM SIGARCH Computer Architecture News*, 42(3):313–324, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lucia:2008:AAD

[LDSC08] Brandon Lucia, Joseph Devietti, Karin Strauss, and Luis Ceze. Atom-Aid: Detecting and surviving atomicity violations. *ACM SIGARCH Computer Architecture News*, 36(3):277–288, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2016:CIS

[LDT+16] Shaoli Liu, Zidong Du, Jinhua Tao, Dong Han, Tao Luo, Yuan Xie, Yunji Chen, and Tianshi Chen. Cambricon: an instruction set architecture for neural networks. *ACM SIGARCH Computer Architecture News*, 44 (3):393–405, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lechner:1974:SED

[Lec74] Robert J. Lechner. Sequentially encoded data structures that support bidirectional scanning. *ACM SIGARCH Computer Architecture News*, 3(4):188–194, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1972:MNC

[Lee72] J. A. N. Lee. My next compiler. *ACM SIGARCH Computer Architecture News*, 1(2): 17–19, April 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1973:VDS

[Lee73] John A. N. Lee. VDL—a definition system for all levels. *ACM SIGARCH Computer Architecture News*, 2(4):41–48, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1985:DMR

[Lee85a] Dik Lun Lee. A distributed multiple-response resolver for value-order retrieval. *ACM*

SIGARCH Computer Architecture News, 13(3):258–265, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1985:HSC

[Lee85b] Rosanna Lee. On "hot spot" contention. *ACM SIGARCH Computer Architecture News*, 13(5):15–20, December 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1988:SSP

[Lee88] D. Lee. Scrambled storage for parallel memory systems. *ACM SIGARCH Computer Architecture News*, 16(2):232–239, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Leighton:1991:SPS

[Lei91] F. T. Leighton. Selected papers from the Symposium on Parallel Algorithms and Architectures. *ACM SIGARCH Computer Architecture News*, 19(1):5, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lesokhin:2017:PFS

[LER+17] Ilya Lesokhin, Haggai Eran, Shachar Raindel, Guy Shapiro, Sagi Grimberg, Liran Liss, Muli Ben-Yehuda, Nadav Amit, and Dan Tsafrir. Page fault support for network controllers. *ACM SIGARCH Computer Architecture News*, 45(1):449–466, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Levy:1992:BRN

[Lev92] David Levy. Book review: *Neural Networks and Fuzzy Systems: A Dynamical Systems Approach to Machine Intelligence* by Bart Kosko (Prentice Hall 1992). *ACM SIGARCH Computer Architecture News*, 20(5):34, December 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Levitan:1982:FEN

[LF82] Steven P. Levitan and Caxton C. Foster. Finding an extremum in a network. *ACM SIGARCH Computer Architecture News*, 10(3):321–325, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lai:1999:MSP

[LF99] An-Chow Lai and Babak Falsafi. Memory sharing predictor: the key to a speculative coherent DSM. *ACM SIGARCH Computer Architecture News*, 27(2):172–183, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lai:2000:SAT

[LF00] An-Chow Lai and Babak Falsafi. Selective, accurate, and timely self-invalidation using last-touch prediction. *ACM SIGARCH Computer Architecture News*, 28(2):139–148, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lai:2001:DBP

[LFF01] An-Chow Lai, Cem Fide, and Babak Falsafi. Dead-block prediction & dead-block correlating prefetchers. *ACM SIGARCH Computer Architecture News*, 29(2):144–154, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lun:2003:OOP

[LFH03] Mok Pak Lun, Anthony Fong, and Gary K. W. Hau. Object-oriented processor requirements with instruction analysis of Java programs. *ACM SIGARCH Computer Architecture News*, 31(5):10–15, December 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lebeck:2000:PAP

[LFZE00] Alvin R. Lebeck, Xiaobo Fan, Heng Zeng, and Carla Ellis. Power aware page allocation. *ACM SIGARCH Computer Architecture News*, 28 (5):105–116, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lumb:2004:DSD

[LG04] Christopher R. Lumb and Richard Golding. D-SPTF: decentralized request distribution in brick-based storage systems. *ACM SIGARCH Computer Architecture News*, 32(5):37–47, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laudon:1992:AIT

[LGH92] James Laudon, Anoop Gupta, and Mark Horowitz. Architectural and implementation tradeoffs in the design of multiple-context processors (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):435, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lupon:2014:SHS

[LGM+14] Marc Lupon, Enric Gibert, Grigorios Magklis, Sridhar Samudrala, Raúl Martínez, Kyriakos Stavrou, and David R. Ditzel. Speculative hardware/software co-designed floating-point multiply-add fusion. *ACM SIGARCH Computer Architecture News*, 42(1):623–638, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lang:1986:RRS

[LH86a] Tomás Lang and Miquel Huguet. Reduced register saving/restoring in single-window register files. *ACM SIGARCH Computer Architecture News*, 14(3):17–26, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1986:ESG

[LH86b] K. Y. Lee and W. Hegazy. The extra stage gamma network. *ACM SIGARCH Computer Architecture News*, 14(2):175–182, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Louri:1988:BPA

[LH88] A. Louri and K. Hwang. A bit-plane architecture for optical computing with two-dimensional symbolic substitution. *ACM SIGARCH Computer Architecture News*, 16 (2):18–27, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Leng:2013:GEE

[LHE+13] Jingwen Leng, Tayler Hetherington, Ahmed ElTantawy, Syed Gilani, Nam Sung Kim, Tor M. Aamodt, and Vijay Janapa Reddi. GPUWattch: enabling energy optimizations in GPGPUs. *ACM SIGARCH Computer Architecture News*, 41(3):487–498, June 2013. ICSA '13 conference proceedings.

LiKamWa:2016:RAC

[LHG+16] Robert LiKamWa, Yunhui Hou, Julian Gao, Mia Polansky, and Lin Zhong. RedEye: analog ConvNet image sensor architecture for continuous mobile vision. *ACM SIGARCH Computer Architecture News*, 44(3): 255–266, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Landin:1991:RFI

[LHH91] Anders Landin, Erik Hagersten, and Seif Haridi. Race-free interconnection networks and multiprocessor consistency. *ACM SIGARCH Computer Architecture News*, 19(3):106–115, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Litaize:1989:MSM

[LHL+89] Daniel Litaize, Omar Hammami, Mustapha Lalam, Adelaziz Mzoughi, and Pascl Sinrat. Multiprocessors with a serial multiport memory and a pseudo crossbar of serial links used as a processor-memory switch. *ACM SIGARCH Computer Architecture News*, 17(6):8–21, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2015:GHS

[LHM+15] Chang Liu, Austin Harris, Martin Maas, Michael Hicks, Mohit Tiwari, and Elaine Shi. GhostRider: a hardware-software system for memory trace oblivious computation. *ACM SIGARCH Computer Architecture News*, 43 (1):87–101, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Levinthal:1987:PCG

[LHPL87] Adam Levinthal, Pat Hanrahan, Mike Paquette, and Jim Lawson. Parallel computers for graphics applications. *ACM SIGARCH Computer Architecture News*, 15 (5):193–198, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2009:APC

[LIMB09] Benjamin C. Lee, Engin Ipek, Onur Mutlu, and Doug Burger. Architecting phase change memory as a scalable DRAM alternative. *ACM SIGARCH Computer Architecture News*, 37(3):2–13, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lindamood:1976:NCA

[Lin76] George Lindamood. On navel contemplation and the art of computer maintenance. *ACM SIGARCH Computer Architecture News*, 5(1):22–23, April 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lindamood:1977:WN

[Lin77] George E. Lindamood. What's in a name? *ACM SIGARCH Computer Architecture News*, 5(8):12–14, April 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lindsay:1981:CMM

[Lin81] Donald C. Lindsay. Cache memory for microprocessors. *ACM SIGARCH Computer Architecture News*, 9(5):6–13, August 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1973:VFS

[Lip73] G. J. Lipovski. A varistructured fail-soft cellular computer. *ACM SIGARCH Computer Architecture News*, 2 (4):161–165, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1976:QS

[Lip76] G. Jack Lipovski. A question of style. *ACM SIGARCH Computer Architecture News*, 5(4):32–38, October 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1977:IFT

[Lip77a] G. J. Lipovski. On imaginary fields, token transfers and floating codes in intelligent secondary memories. *ACM SIGARCH Computer Architecture News*, 6(2):17–22, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1977:VMM

[Lip77b] G. Jack Lipovski. On virtual memories and micronetworks. *ACM SIGARCH Computer Architecture News*, 5(7):125–134, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1978:JFM

[Lip78a] G. Jack Lipovski. Just a few more words on microprocessors of the future. *ACM SIGARCH Computer Architecture News*, 6(6):18–21, February 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1978:SPI

[Lip78b] G. Jack Lipovski. Semantic paging on intelligent discs. *ACM SIGARCH Computer Architecture News*, 7(2):30–34, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lippmann:1988:ICN

[Lip88] Richard P. Lippmann. An introduction to computing with neural nets. *ACM SIGARCH Computer Architecture News*, 16(1):7–25, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1998:RBN

[Lip98] Jack Lipovski. Retrospective: Banyan networks for partitioning multiprocessor systems. In ACM [ACM98a], page 1. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Litchfield:1994:IES

[Lit94] Kay P. Litchfield. Instruction execution sequence confirmation. *ACM SIGARCH Computer Architecture News*, 22 (3):14–18, June 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Love:1990:ISV

[LJ90] Carl E. Love and Harry F. Jordan. An investigation of static versus dynamic scheduling. *ACM SIGARCH Computer Architecture News*, 18(3a): 192–201, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liaqat:2016:SEE

[LJdL+16] Daniyal Liaqat, Silviu Jingoi, Eyal de Lara, Ashvin Goel, Wilson To, Kevin Lee, Italo De Moraes Garcia, and Manuel Saldana. Sidewinder: an energy efficient and developer friendly heterogeneous architecture for continuous mobile sensing. *ACM SIGARCH Computer Architecture News*, 44(2):205–215, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2016:FHL

[LJF+16] Colin Yu Lin, Zhenghong Jiang, Cheng Fu, Hayden Kwok-Hay So, and Haigang Yang. FPGA high-level synthesis versus overlay: Comparisons on computation kernels. *ACM SIGARCH Computer Architecture News*, 44 (4):92–97, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Liu:2013:ESD

[LJK+13] Jamie Liu, Ben Jaiyen, Yoongu Kim, Chris Wilkerson, and Onur Mutlu. An experimental study of data retention behavior in modern DRAM devices: implications for retention time profiling mechanisms. *ACM SIGARCH Computer Architecture News*, 41(3):60–71, June 2013. ICSA '13 conference proceedings.

Li:2002:UIO

[LJS+02] Tao Li, Lizy Kurian John, Anand Sivasubramaniam, N. Vijaykrishnan, and Juan Rubio. Understanding and improving operating system effects in control flow prediction. *ACM SIGARCH Computer Architecture News*, 30(5):68–80, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2012:RRA

[LJVM12] Jamie Liu, Ben Jaiyen, Richard Veras, and Onur Mutlu. RAIDR: Retention-Aware Intelligent DRAM Refresh. *ACM SIGARCH Computer Architecture News*, 40 (3):1–12, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Lee:1991:PCP

[LK91] Edward K. Lee and Randy H. Katz. Performance consequences of parity placement in disk arrays. *ACM SIGARCH Computer Architecture News*, 19(2):190–199, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1991:FPP

[LKB91] Roland L. Lee, Alex Y. Kwok, and Fayé A. Briggs. The floating point performance of a superscalar SPARC processor.

ACM SIGARCH Computer Architecture News, 19(2):28–37, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2010:DGV

[LKC+10] Victor W. Lee, Changkyu Kim, Jatin Chhugani, Michael Deisher, Daehyun Kim, Anthony D. Nguyen, Nadathur Satish, Mikhail Smelyanskiy, Srinivas Chennupaty, Per Hammarlund, Ronak Singhal, and Pradeep Dubey. Debunking the 100X GPU vs. CPU myth: an evaluation of throughput computing on CPU and GPU. *ACM SIGARCH Computer Architecture News*, 38(3):451–460, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lotfi-Kamran:2012:SP

[LKGF+12] Pejman Lotfi-Kamran, Boris Grot, Michael Ferdman, Stavros Volos, Onur Kocberber, Javier Picorel, Almutaz Adileh, Djordje Jevdjic, Sachin Idgunji, Emre Ozer, and Babak Falsafi. Scale-out processors. *ACM SIGARCH Computer Architecture News*, 40(3):500–511, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Lebeck:2002:LFI

[LKL+02] Alvin R. Lebeck, Jinson Koppanalil, Tong Li, Jaidev Patwardhan, and Eric Rotenberg. A large, fast instruction window for tolerating cache misses. *ACM SIGARCH Computer Architecture News*, 30(2):59–70, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2005:APC

[LKM+05] Ruby B. Lee, Peter C. S. Kwan, John P. McGregor, Jeffrey Dwoskin, and Zhenghong Wang. Architecture for protecting critical secrets in microprocessors. *ACM SIGARCH Computer Architecture News*, 33(2):2–13, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2014:SLH

[LKO+14] Xun Li, Vineeth Kashyap, Jason K. Oberg, Mohit Tiwari, Vasanth Ram Rajarathinam, Ryan Kastner, Timothy Sherwood, Ben Hardekopf, and Frederic T. Chong. Sapper: a language for hardware-level security policy enforcement. *ACM SIGARCH Computer Architecture News*, 42(1):97–112, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lease:1988:CPS

[LL88] Mark Lease and Mac Lively. Comparing production system architectures. *ACM SIGARCH Computer Architecture News*, 16(4):108–116, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laudon:1997:SOC

[LL97] James Laudon and Daniel Lenoski. The SGI Origin: a cc-NUMA highly scalable server. *ACM SIGARCH Computer Architecture News*, 25(2):241–251, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lenoski:1998:RDP

[LL98] Daniel E. Lenoski and James P. Laudon. Retrospective: The DASH prototype: implementation and performance. In ACM [ACM98a], pages 80–82. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Lepak:2000:VLS

[LL00] Kevin M. Lepak and Mikko H. Lipasti. On the value locality of store instructions. *ACM SIGARCH Computer Architecture News*, 28(2):182–191, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lepak:2002:TSS

[LL02] Kevin M. Lepak and Mikko H. Lipasti. Temporally silent stores. *ACM SIGARCH Computer Architecture News*, 30(5):30–41, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2014:OVM

[LL14] Ming Liu and Tao Li. Optimizing virtual machine consolidation performance on NUMA server architecture for cloud workloads. *ACM SIGARCH Computer Architecture News*, 42(3):325–336, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2016:MTP

[LL16] Felix Xiaozhu Lin and Xu Liu. memif: Towards programming heterogeneous memory asynchronously. *ACM SIGARCH Computer Architecture News*, 44(2):369–383, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lynch:1998:LLL

[LLC98] William L. Lynch, Gary Lauterbach, and Joseph I. Chamdani. Low load latency through sum-addressed memory (SAM). *ACM SIGARCH*

Computer Architecture News, 26(3):369–379, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lopez-Lagunas:2006:MBO

[LLC06] Abelardo López-Lagunas and Sek M. Chai. Memory bandwidth optimization through stream descriptors. *ACM SIGARCH Computer Architecture News*, 34(1):57–64, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2014:GVM

[LLC+14] Lei Liu, Yong Li, Zehan Cui, Yungang Bao, Mingyu Chen, and Chengyong Wu. Going vertical in memory management: handling multiplicity by multi-policy. *ACM SIGARCH Computer Architecture News*, 42(3):169–180, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:1994:RCC

[LLCP94] Jin-Ho Lee, Min-Young Lee, Seong-Uk Choi, and Myong-Soon Park. Reducing cache conflicts in data cache prefetching. *ACM SIGARCH Computer Architecture News*, 22 (4):71–77, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2004:PDE

[LLD+04] Xiaodong Li, Zhenmin Li, Francis David, Pin Zhou, Yuanyuan Zhou, Sarita Adve, and Sanjeev Kumar. Performance directed energy management for main memory and disks. *ACM SIGARCH Computer Architecture News*, 32 (5):271–283, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2017:API

[LLD+17] Zhaoshi Li, Leibo Liu, Yangdong Deng, Shouyi Yin, Yao Wang, and Shaojun Wei. Aggressive pipelining of irregular applications on reconfigurable hardware. *ACM SIGARCH Computer Architecture News*, 45(2):575–586, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lun:2003:MMO

[LLF03] Mok Pak Lun, Richard Li, and Anthony Fong. Method manipulation in an object-oriented processor. *ACM SIGARCH Computer Architecture News*, 31(4):18–25, September 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lenoski:1990:DBC

[LLG+90] Daniel Lenoski, James Laudon, Kourosh Gharachorloo, Anoop Gupta, and John Hennessy.

The directory-based cache coherence protocol for the DASH multiprocessor. *ACM SIGARCH Computer Architecture News*, 18(3a):148–159, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lenoski:1992:DPI

[LLJ+92] Daniel Lenoski, James Laudon, Truman Joe, David Nakahira, Luis Stevens, Anoop Gupta, and John Hennessy. The DASH prototype: implementation and performance. *ACM SIGARCH Computer Architecture News*, 20(2):92–103, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lenoski:1998:DPI

[LLJ+98] Daniel Lenoski, James Laudon, Truman Joe, David Nakahira, Luis Stevens, Anoop Gupta, and John Hennessy. The DASH prototype: implementation and performance. In ACM [ACM98a], pages 418–429. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Liu:2017:DAD

[LLL+17] Haopeng Liu, Guangpu Li, Jeffrey F. Lukman, Jiaxin Li, Shan Lu, Haryadi S. Gunawi, and Chen Tian. DCatch: Automatically detecting distributed concurrency bugs in cloud systems. *ACM SIGARCH Computer Architecture News*, 45 (1):677–691, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Leesatapornwongsa:2016:TTN

[LLLG16] Tanakorn Leesatapornwongsa, Jeffrey F. Lukman, Shan Lu, and Haryadi S. Gunawi. TaxDC: a taxonomy of non-deterministic concurrency bugs in datacenter distributed systems. *ACM SIGARCH Computer Architecture News*, 44(2):517–530, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Liu:2017:ITN

[LLN+17] Ming Liu, Liang Luo, Jacob Nelson, Luis Ceze, Arvind Krishnamurthy, and Kishore Atreya. IncBricks: Toward in-network computation with an in-network cache. *ACM SIGARCH Computer Architecture News*, 45(1):795–809, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:1982:DFT

[LlW82] Woei Lin and Chuan lin Wu. Design of a 2 × 2 fault-tolerant switching element. *ACM SIGARCH Computer Architecture News*, 10(3):181–189, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1984:PAC

[LlW84] Manjai Lee and Chuan lin Wu. Performance analysis of circuit switching, baseline interconnection networks. *ACM SIGARCH Computer Architecture News*, 12(3):82–90, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lin:2006:SLP

[LLW+06] Yuan Lin, Hyunseok Lee, Mark Woh, Yoav Harel, Scott Mahlke, Trevor Mudge, Chaitali Chakrabarti, and Krisztian Flautner. SODA: a low-power architecture for software radio. *ACM SIGARCH Computer Architecture News*, 34(2):89–101, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2013:CTP

[LLZ+13] Ziyi Liu, JongHyuk Lee, Junyuan Zeng, Yuanfeng Wen, Zhiqiang Lin, and Weidong Shi. CPU transparent protection of OS kernel and hypervisor integrity with programmable DRAM. *ACM SIGARCH Computer Architecture News*, 41(3):392–403, June 2013. ICSA '13 conference proceedings.

Lawson:1974:ASH

[LM74] Harold W. Lawson, Jr. and Bengt Magnhagen. Advantages of structured hardware. *ACM SIGARCH Computer Architecture News*, 3(4):152–158, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:1976:SSD

[LM76] Philip S. Liu and Frederic J. Mowle. Selection schemes for dynamically microcoding Fortran programs. *ACM SIGARCH Computer Architecture News*, 4(4):122.6, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lougheed:1980:CPP

[LM80] Robert M. Lougheed and David L. McCubbrey. The cytocomputer: a practical pipelined image processor. *ACM SIGARCH Computer Architecture News*, 8(3):271–277, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Luk:1999:MFE

[LM99] Chi-Keung Luk and Todd C. Mowry. Memory forwarding: enabling aggressive layout optimizations by guaranteeing the safety of data relocation. *ACM SIGARCH Computer Architecture News*, 27 (2):88–99, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipasti:2004:PRI

[LMG04] Mikko H. Lipasti, Brian R. Mestan, and Erika Gunadi. Physical register inlining. *ACM SIGARCH Computer Architecture News*, 32(2): 325, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Leung:1976:CSF

[LMND76] Clement K. C. Leung, David P. Misunas, Andrij Neczwid, and Jack B. Dennis. A computer simulation facility for packet communication architecture. *ACM SIGARCH Computer Architecture News*, 4(4):58–63, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Litaize:1992:TSM

[LMRS92] Daniel Litaize, Abdelaziz Mzoughi, Christine Rochange, and Pascal Sainrat. Towards a shared-memory massively parallel multiprocessor. *ACM SIGARCH Computer Architecture News*, 20(2):70–79, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lim:2013:TSS

[LMS+13] Kevin Lim, David Meisner, Ali G. Saidi, Parthasarathy Ranganathan, and Thomas F. Wenisch. Thin servers with smart pipes: designing SoC accelerators for memcached. *ACM SIGARCH Computer Architecture News*, 41(3):36–47, June 2013. ICSA '13 conference proceedings.

Lin:1991:DFM

[LN91] Xiaola Lin and Lionel M. Ni. Deadlock-free multicast wormhole routing in multicomputer networks. *ACM SIGARCH Computer Architecture News*, 19(3):116–125, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Louri:1992:PEO

[LN92] Ahmed Louri and Jongwhoa Na. Parallel electro-optical rule-based system for fast execution of expert systems (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):427, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lakshmikanthan:2007:VVC

[LN07] Preetham Lakshmikanthan and Adrian Nuñez. VCLEARIT: a VLSI CMOS circuit leakage reduction technique for nanoscale technologies. *ACM SIGARCH Computer Architecture News*, 35(5):10–16, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2008:GSF

[LNA08] Jae W. Lee, Man Cheuk Ng, and Krste Asanovic. Globally-synchronized frames for guaranteed quality-of-service in on-chip networks. *ACM SIGARCH Computer Architecture News*, 36(3):89–100, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lvin:2008:ATA

[LNBZ08] Vitaliy B. Lvin, Gene Novark, Emery D. Berger, and Benjamin G. Zorn. Archipelago: trading address space for reliability and security. *ACM SIGARCH Computer Architecture News*, 36(1):115–124, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2011:EAH

[LNEHR11] Haisheng Liu, Smail Niar, Yassin El-Hillali, and Atika Rivenq. Embedded architecture with hardware accelerator for target recognition in driver assistance system. *ACM SIGARCH Computer Architecture News*, 39(4):56–59, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2012:ESC

[LNGR12] Changhui Lin, Vijay Nagarajan, Rajiv Gupta, and Bharghava Rajaram. Efficient sequential consistency via conflict ordering. *ACM SIGARCH Computer Architecture News*, 40(1):273–286, March 2012. ASPLOS '12 conference proceedings.

Li:2006:DMC

[LNR+06] Feihui Li, Chrysostomos Nicopoulos, Thomas Richardson, Yuan Xie, Vijaykrishnan Narayanan, and Mahmut Kandemir. Design and management of 3D chip multiprocessors using network-in-memory. *ACM SIGARCH Computer Architecture News*, 34(2):130–141, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lofgren:1974:RCT

[Löf74] Lennart Löfgren. Reference concepts in a tree structured address space. *ACM SIGARCH Computer Architecture News*, 3(4):71–79, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Loh:2008:SMA

[Loh08] Gabriel H. Loh. 3D-stacked memory architectures for multi-core processors. *ACM SIGARCH Computer Architecture News*, 36(3):453–464, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lorin:1990:MRC

[Lor90] Harold Lorin. A model for recentralization of computing:

(distributed processing comes home). *ACM SIGARCH Computer Architecture News*, 18 (1):81, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lampson:1980:PHP

[LP80] Butler W. Lampson and Kenneth A. Pier. A processor for a high-performance personal computer. *ACM SIGARCH Computer Architecture News*, 8(3):146–160, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:1991:EMS

[LP91] Kai Li and Karin Petersen. Evaluation of memory system extensions. *ACM SIGARCH Computer Architecture News*, 19(3):84–93, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lampson:1998:PHP

[LP98] Butler W. Lampson and Kenneth A. Pier. A processor for a high-performance personal computer. In ACM [ACM98a], pages 180–194. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Luo:2009:DPT

[LPH+09] Yangchun Luo, Venkatesan Packirisamy, Wei-Chung Hsu, Antonia Zhai, Nikhil Mungre, and Ankit Tarkas. Dynamic performance tuning for speculative threads. *ACM SIGARCH Computer Architecture News*, 37(3):462–473, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2011:FSD

[LPMZ11] Song Liu, Karthik Pattabiraman, Thomas Moscibroda, and Benjamin G. Zorn. Flikker: saving DRAM refresh-power through critical data partitioning. *ACM SIGARCH Computer Architecture News*, 39(1):213–224, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lu:2008:LMC

[LPSZ08] Shan Lu, Soyeon Park, Eunsoo Seo, and Yuanyuan Zhou. Learning from mistakes: a comprehensive study on real world concurrency bug characteristics. *ACM SIGARCH Computer Architecture News*, 36(1):329–339, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2012:ICO

[LQL12] Chao Li, Amer Qouneh, and Tao Li. iSwitch: coordinating and optimizing renewable energy powered server clusters. *ACM SIGARCH Computer Architecture News*, 40 (3):512–523, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Liu:1977:MCP

[LR77] Ming T. Liu and Cecil C. Reames. Message communication protocol and operating system design for the Distributed Loop Computer Network (DLCN). *ACM SIGARCH Computer Architecture News*, 5(7):193–200, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1990:SMC

[LR90] Joonwon Lee and Umakishore Ramachandran. Synchronization with multiprocessor caches. *ACM SIGARCH Computer Architecture News*, 18(3a):27–37, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:1993:TTF

[LR93] Qiang Li and Naphtali Rishe. A transputer T9000 family based architecture for parallel database machines. *ACM SIGARCH Computer Architecture News*, 21(5):55–62, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lim:2008:UDN

[LRC+08] Kevin Lim, Parthasarathy Ranganathan, Jichuan Chang, Chandrakant Patel, Trevor Mudge, and Steven Reinhardt. Understanding and designing new server architectures for emerging warehouse-computing environments. *ACM SIGARCH Computer Architecture News*, 36(3):315–326, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Luque:1990:ITD

[LRHM90] Emilio Luque, Ana Ripoll, Porfidio Hernández, and Tomás Margalef. Impact of task duplication on static-scheduling performance in multiprocessor systems with variable execution-time tasks. *ACM SIGARCH Computer Architecture News*, 18(3b): 439–446, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2008:UPH

[LRS+08] Man-Lap Li, Pradeep Ramachandran, Swarup Kumar Sahoo, Sarita V. Adve, Vikram S. Adve, and Yuanyuan Zhou. Understanding the propagation of hard errors to software and implications for resilient system design. *ACM SIGARCH Computer Architecture News*, 36(1):265–276, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lymberopoulos:2012:PIW

[LRS+12] Dimitrios Lymberopoulos, Oriana Riva, Karin Strauss, Akshay Mittal, and Alexandros Ntoulas. PocketWeb: instant web browsing for mobile devices. *ACM SIGARCH Computer Architecture News*, 40(1):1–12, March 2012. ASPLOS '12 conference proceedings.

Lam:1991:CPO

[LRW91] Monica D. Lam, Edward E. Rothberg, and Michael E. Wolf. The cache performance and optimizations of blocked algorithms. *ACM SIGARCH Computer Architecture News*, 19(2):63–74, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1973:PFA

[LS73] G. Jack Lipovski and Stephen Anthony Szygenda, editors. *Proceedings of the First Annual Symposium on Computer Architecture, December 9–11, 1973, University of Florida, Gainesville, Florida*, volume 2(4) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1973. CODEN CANED2, CPAADU. ISBN ???? ISSN 0163-5964 (ACM), 0884-7495 (IEEE), 0149-7111. LCCN TK7885.A1. URL `http://portal.acm.org/toc.cfm?id=800123`. IEEE catalog no. 73CH0824-3C.

Landson:1977:CSA

[LS77] Barry M. Landson and Robert G. Sargent. A comparison of sequential and associate computing of priority queues. *ACM SIGARCH Computer Architecture News*, 6(2):77–78, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1982:RPD

[LS82] Yann-Hang Lee and Kang G. Shin. Rollback propagation detection and performance evaluation of FTMR2M—a fault-tolerant multiprocessor. *ACM SIGARCH Computer Architecture News*, 10(3):171–180, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Louri:1992:NCD

[LS92] Ahmed Louri and Hongki Sung. A new compiler-directed cache coherence scheme for shared memory multiprocessors with fast and parallel explicit invalidation (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):428, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ligon:1996:DLB

[LS96] W. B. Ligon III and Daniel C. Stanzione, Jr. Distributing and load-balancing for loops in scientific applications. *ACM SIGARCH Computer Architecture News*, 24(3):9–17, June 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2012:RSE

[LS12a] Min Lee and Karsten Schwan. Region scheduling: efficiently using the cache architectures via page-level affinity. *ACM SIGARCH Computer Architecture News*, 40(1):451–462, March 2012. ASPLOS '12 conference proceedings.

Lin:2012:EED

[LS12b] Colin Yu Lin and Hayden Kwok-Hay Kwok-Hay So. Energy-efficient dataflow computations on FPGAs using application-specific coarse-grain architecture synthesis. *ACM SIGARCH Computer Architecture News*, 40(5):58–63, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Lashgar:2015:CSR

[LSB15] Ahmad Lashgar, Ebad Salehi, and Amirali Baniasadi. A case study in reverse engineering GPGPUs: Outstanding memory handling resources. *ACM SIGARCH Computer Architecture News*, 43(4):15–21, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lundvall:2008:APS

[LSFK08] Håkan Lundvall, Kristian Stavåker, Peter Fritzson, and Christoph Kessler. Automatic parallelization of simulation code for equation-based models with software pipelining and measurements on three platforms. *ACM SIGARCH Computer Architecture News*, 36(5):46–55, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2017:LAC

[LSL+17] Ang Li, Shuaiwen Leon Song, Weifeng Liu, Xu Liu, Akash Kumar, and Henk Corporaal. Locality-aware CTA clustering for modern GPUs. *ACM SIGARCH Computer Architecture News*, 45(1):297–311, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lustig:2016:CVM

[LSMB16] Daniel Lustig, Geet Sethi, Margaret Martonosi, and Abhishek Bhattacharjee. COATCheck: Verifying memory ordering at the hardware-os interface. *ACM SIGARCH Computer Architecture News*, 44 (2):233–247, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lowell:2004:DVM

[LSS04] David E. Lowell, Yasushi Saito, and Eileen J. Samberg. Devirtualizable virtual machines enabling general, single-node, online maintenance. *ACM SIGARCH Computer Architecture News*, 32 (5):211–223, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laurenzano:2005:LCT

[LSSG05] Michael Laurenzano, Beth Simon, Allan Snavely, and Meghan Gunn. Low cost trace-driven memory simulation using SimPoint. *ACM SIGARCH Computer Architecture News*, 33(5):81–86, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liu:2014:NDU

[LSY+14] Ren-Shuo Liu, De-Yu Shen, Chia-Lin Yang, Shun-Chih Yu, and Cheng-Yuan Michael Wang. NVM duet: unified working memory and persistent store architecture. *ACM SIGARCH Computer Architecture News*, 42(1):455–470, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lu:2006:ADA

[LTQZ06] Shan Lu, Joseph Tucek, Feng Qin, and Yuanyuan Zhou. AVIO: detecting atomicity violations via access interleaving invariants. *ACM SIGARCH Computer Architecture News*, 34(5):37–48, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Luk:2001:TML

[Luk01] Chi-Keung Luk. Tolerating memory latency through software-controlled pre-execution in simultaneous multithreading processors. *ACM SIGARCH Computer Architecture News*, 29(2):40–51, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lunde:1975:MDW

[Lun75] Åmund Lunde. More data on the O/W ratios: a note on a paper by Flynn. *ACM SIGARCH Computer Architecture News*, 4(1):9–13, March 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lundstrom:1985:DCH

[Lun85] Stephen F. Lundstrom. A decentralized control, highly concurrent multiprocessor. *ACM SIGARCH Computer Architecture News*, 13(3):145–151, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1988:FOI

[LV88] G. J. Lipovski and P. Vaughan. A fetch-and-op implementation for parallel computers. *ACM SIGARCH Computer Architecture News*, 16(2):384–392, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lam:1992:LCF

[LW92] Monica S. Lam and Robert P. Wilson. Limits of control flow on parallelism. *ACM SIGARCH Computer Architecture News*, 20(2):46–57, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lebeck:1995:DSI

[LW95] Alvin R. Lebeck and David A. Wood. Dynamic self-invalidation: reducing coherence overhead in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 23(2):48–59, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lorton:2007:ABL

[LW07] K. Patrick Lorton and David S. Wise. Analyzing block locality in Morton-order and Morton-hybrid matrices. *ACM SIGARCH Computer Architecture News*, 35(4):6–12, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Liang:2008:RVT

[LWB08] Xiaoyao Liang, Gu-Yeon Wei, and David Brooks. ReVIVaL: a variation-tolerant architecture using voltage interpolation and variable latency. *ACM SIGARCH Computer Architecture News*, 36(3):191–202, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2016:PAD

[LWH+16] Chao Li, Zhenhua Wang, Xiaofeng Hou, Haopeng Chen, Xiaoyao Liang, and Minyi Guo. Power attack defense: securing battery-backed data centers. *ACM SIGARCH Computer Architecture News*, 44(3):493–505, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2012:RUL

[LWLZ12] Felix Xiaozhu Lin, Zhen Wang, Robert LiKamWa, and Lin Zhong. Reflex: using low-power processors in smartphones without knowing them. *ACM SIGARCH Computer Architecture News*, 40 (1):13–24, March 2012. ASPLOS '12 conference proceedings.

Lustig:2017:ASC

[LWPG17] Daniel Lustig, Andrew Wright, Alexandros Papakonstantinou, and Olivier Giroux. Automated synthesis of comprehensive memory model litmus test suites. *ACM SIGARCH Computer Architecture News*, 45(1):661–675, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:2010:TTD

[LWRC10] Janghaeng Lee, Haicheng Wu, Madhumitha Ravichandran, and Nathan Clark. Thread Tailor: dynamically weaving threads together for efficient, adaptive parallel applications. *ACM SIGARCH Computer Architecture News*, 38(3):270–279, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lipovski:1975:NNA

[LWS75] G. Jack Lipovski, Stanley Y. W., and Sr. On non-numeric architecture. *ACM SIGARCH Computer Architecture News*, 4(1):14–29, March 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:2010:REO

[LWV+10] Dongyoon Lee, Benjamin Wester, Kaushik Veeraraghavan, Satish Narayanasamy, Peter M. Chen, and Jason Flinn. Respec: efficient online multiprocessor replay via speculation and external determinism. *ACM SIGARCH Computer Architecture News*, 38(1):77–90, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lin:2014:KMO

[LWZ14] Felix Xiaozhu Lin, Zhen Wang, and Lin Zhong. K2: a mobile operating system for heterogeneous coherence domains. *ACM SIGARCH Computer Architecture News*, 42 (1):285–300, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Liu:1988:EBL

[LYBC88] W. Liu, T.-F. Yeh, W. E. Batchelor, and R. Cavin. Exploiting bit level concurrency in real-time geometric feature extractions. *ACM SIGARCH Computer Architecture News*, 16(2):167–174, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Leeser:2011:CWP

[LYBK11] Miriam Leeser, Devon Yablonski, Dana Brooks, and Laurie Smith King. The challenges of writing portable, correct and high performance libraries for GPUs. *ACM SIGARCH Computer Architecture News*, 39(4):2–7, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lee:2000:RVC

[LYK+00] Junpyo Lee, Byung-Sun Yang, Suhyun Kim, Kemal Ebcioğlu, Erik Altman, Seungil Lee, Yoo C. Chung, Heungbok Lee, Je Hyung Lee, and Soo-Mook Moon. Reducing virtual call overheads in a Java VM just-in-time compiler. *ACM SIGARCH Computer Architecture News*, 28(1):21–33, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lee:1987:MCD

[LYL87] R. L. Lee, P. C. Yew, and D. H. Lawrie. Multiprocessor cache design considerations. *ACM SIGARCH Computer Architecture News*, 15 (2):253–262, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Li:2016:FBV

[LYMY16] Chengzhe Li, Lai Yoong Yee, Hiroshi Maruyama, and Yoshiki Yamaguchi. FPGA-based volleyball player tracker. *ACM SIGARCH Computer Architecture News*, 44(4):80–86, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Labrecque:2007:CCG

[LYS07] Martin Labrecque, Peter Yiannacouras, and J. Gregory Steffan. Custom code generation for soft processors. *ACM SIGARCH Computer Architecture News*, 35(3):9–19, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Lin:1993:PIA

[LZ93] Z. Lin and S. Zhou. Parallelizing I/O intensive applications for a workstation cluster: a case study. *ACM SIGARCH Computer Architecture News*, 21(5):15–22, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Laurenzano:2016:PIM

[LZC+16] Michael A. Laurenzano, Yunqi Zhang, Jiang Chen, Lingjia Tang, and Jason Mars. PowerChop: identifying and managing non-critical units in hybrid processor architectures. *ACM SIGARCH Computer Architecture News*, 44 (3):140–152, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Liu:2017:DBD

[LZC+17] Mengxing Liu, Mingxing Zhang, Kang Chen, Xuehai Qian, Yongwei Wu, Weimin Zheng, and Jinglei Ren. DudeTM: Building durable transactions with decoupling for persistent memory. *ACM SIGARCH Computer Architecture News*, 45 (1):329–343, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Lin:2007:TMM

[LZZ+07] Jiang Lin, Hongzhong Zheng, Zhichun Zhu, Howard David, and Zhao Zhang. Thermal modeling and management of DRAM memory systems. *ACM SIGARCH Computer Architecture News*, 35(2):312–322, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miller:2006:SBI

[MA06] Jason E. Miller and Anant Agarwal. Software-based instruction caching for embedded processors. *ACM SIGARCH Computer Architecture News*, 34(5):293–302, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Morrison:2014:FFW

[MA14] Adam Morrison and Yehuda Afek. Fence-free work stealing on bounded TSO processors. *ACM SIGARCH Computer Architecture News*, 42 (1):413–426, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Morrison:2015:TBT

[MA15] Adam Morrison and Yehuda Afek. Temporally bounding TSO for fence-free asymmetric synchronization. *ACM SIGARCH Computer Architecture News*, 43(1):45–58, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Malka:2015:REI

[MABYT15] Moshe Malka, Nadav Amit, Muli Ben-Yehuda, and Dan Tsafrir. rIOMMU: Efficient IOMMU for I/O devices that employ ring buffers. *ACM SIGARCH Computer Architecture News*, 43(1):355–368, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Machanick:1996:CSM

[Mac96] Philip Machanick. The case for SRAM main memory. *ACM SIGARCH Computer Architecture News*, 24(5):23–30, December 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Machanick:1998:SVL

[Mac98] Philip Machanick. Streaming vs. latency in information mass-transit. *ACM SIGARCH Computer Architecture News*, 26(5):4–6, December 1998.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Machanick:1999:CRA

[Mac99] Phillip Machanick. Correction to RAMpage ASPLOS paper. *ACM SIGARCH Computer Architecture News*, 27(4):2–5, September 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Madruga:1994:BRI

[Mad94a] Ewerton Longoni Madruga. Book review: *Internetworking with TCP/IP, vol. III: Client-Server programming and applications (BSD Sockets version)* by Douglas E. Comer and David L. Stevens (Prentice-Hall, 1993). *ACM SIGARCH Computer Architecture News*, 22(3):29–30, June 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Madruga:1994:BRS

[Mad94b] Ewerton Longoni Madruga. Book review: *SNMP, SNMPv2, and CMIP: The Practical Guide to Network Management Standards* by William Stallings (Addison-Wesley Publishing Company Inc. 1993). *ACM SIGARCH Computer Architecture News*, 22(1):60–61, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Manoochehri:2011:CCP

[MAD11] Mehrtash Manoochehri, Murali Annavaram, and Michel Dubois. CPPC: correctable parity protected cache. *ACM SIGARCH Computer Architecture News*, 39(3):223–234, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Monchiero:2009:HSC

[MAF+09] Matteo Monchiero, Jung Ho Ahn, Ayose Falcón, Daniel Ortega, and Paolo Faraboschi. How to simulate 1000 cores. *ACM SIGARCH Computer Architecture News*, 37(2):10–19, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Maas:2016:THL

[MAHK16] Martin Maas, Krste Asanović, Tim Harris, and John Kubiatowicz. Taurus: a holistic language runtime system for coordinating distributed managed-language applications. *ACM SIGARCH Computer Architecture News*, 44 (2):457–471, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Malek:1980:CCA

[Mal80] Miroslaw Malek. A comparison connection assignment for diagnosis of multiprocessor systems. *ACM SIGARCH*

Computer Architecture News, 8(3):31–36, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moncusi:2001:IES

[MAL01] M. Angels Moncusi, Alex Arenas, and Jesus Labarta. Improving energy saving in hard real time systems via a modified dual priority scheduling. *ACM SIGARCH Computer Architecture News*, 29(5):19–24, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Manjikian:2001:MESb

[Man01a] Naraig Manjikian. More enhancements of the SimpleScalar tool set. *ACM SIGARCH Computer Architecture News*, 29(4):5–12, September 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Manjikian:2001:MESa

[Man01b] Naraig Manjikian. Multiprocessor enhancements of the SimpleScalar tool set. *ACM SIGARCH Computer Architecture News*, 29(1):8–15, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marvel:1973:HHA

[Mar73] Orin E. Marvel. Happe Honeywell Associative Parallel Processing Ensemble. *ACM SIGARCH Computer Architecture News*, 2(4):261–267, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marvel:1974:SSP

[Mar74] Orin E. Marvel. SPEAC: special purpose electronic area correlator. *ACM SIGARCH Computer Architecture News*, 3(4):91–94, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Markenscoff:1982:MPS

[Mar82] Pauline Markenscoff. A multiple processor system for real time control tasks. *ACM SIGARCH Computer Architecture News*, 10(3):274–280, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marovac:1983:IID

[Mar83a] Nenad Marovac. On interprocess interaction in distributed architectures. *ACM SIGARCH Computer Architecture News*, 11(4):17–22, September 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marovac:1983:SAD

[Mar83b] Nenad Marovac. A systematic approach to the design and implementation of a computer instruction set. *ACM SIGARCH Computer Architecture News*, 11(1):19–24, March 1983. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mark:1985:SCF

[Mar85] Peter B. Mark. The Sequoia computer: a fault-tolerant tightly-coupled multiprocessor architecture. *ACM SIGARCH Computer Architecture News*, 13(3):232, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Maren:1988:CRI

[Mar88] A. Jean Maren. Conference report: IEEE First International Conference on Neural Networks. *ACM SIGARCH Computer Architecture News*, 16(1):45–46, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Margolus:2000:EDA

[Mar00] Norman Margolus. An embedded DRAM architecture for large-scale spatial-lattice computations. *ACM SIGARCH Computer Architecture News*, 28(2):149–160, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Massalin:1987:SLS

[Mas87] Henry Massalin. Superoptimizer: a look at the smallest program. *ACM SIGARCH Computer Architecture News*, 15(5):122–126, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mashey:1996:AP

[Mas96] John Mashey. Architectural potholes. *ACM SIGARCH Computer Architecture News*, 24(4):18, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mashey:2004:WBM

[Mas04] John R. Mashey. War of the benchmark means: time for a truce. *ACM SIGARCH Computer Architecture News*, 32(4):1–14, September 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mysore:2006:IC

[MAS+06] Shashidhar Mysore, Banit Agrawal, Navin Srivastava, Sheng-Chih Lin, Kaustav Banerjee, and Tim Sherwood. Introspective 3D chips. *ACM SIGARCH Computer Architecture News*, 34(5):264–273, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matteucci:1978:DSA

[Mat78] Dante R. Matteucci. A distributed structure for the automization of the Catalog of the National Cultural Heritage: experiences and proposals. *ACM SIGARCH Computer Architecture News*, 7(2):121–133, August 1978.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matelan:1985:FM

[Mat85] Nicholas Matelan. The FLEX/32 multicomputer. *ACM SIGARCH Computer Architecture News*, 13(3):209–213, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matthes:1990:HRG

[Mat90] Wolfgang Matthes. Hardware Resources: a generalizing view on computer architectures. *ACM SIGARCH Computer Architecture News*, 18 (2):7–14, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matloff:1991:AAS

[Mat91a] Norman Matloff. An argument against scalable cache coherency. *ACM SIGARCH Computer Architecture News*, 19(4):117–123, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matthes:1991:HMO

[Mat91b] Wolfgang Matthes. How many operation units are adequate? *ACM SIGARCH Computer Architecture News*, 19(4):94–108, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matsui:1992:DRM

[Mat92] Shogo Matsui. Dynamic refresh method for dynamic RAMs. *ACM SIGARCH Computer Architecture News*, 20(4):9–16, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Matthes:2010:RIC

[Mat10] Wolfgang Matthes. Resources instead of cores? *ACM SIGARCH Computer Architecture News*, 38(2):49–63, May 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mayer:1982:ABB

[May82] Alastair J. W. Mayer. The architecture of the Burroughs B5000: 20 years later and still ahead of the times? *ACM SIGARCH Computer Architecture News*, 10(4):3–10, June 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mazare:1977:FEH

[Maz77] Guy Mazare. A few examples of how to use a symmetrical multi-micro-processor. *ACM SIGARCH Computer Architecture News*, 5(7):57–62, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Myers:1980:HIC

[MB80] G. J. Myers and B. R. S. Buckingham. A hardware implementation of capability-based addressing. *ACM SIGARCH Computer Architecture News*, 8(6):12–24, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mogul:1991:ECS

[MB91] Jeffrey C. Mogul and Anita Borg. The effect of context switches on cache performance. *ACM SIGARCH Computer Architecture News*, 19(2):75–84, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Muralimanohar:2007:IDC

[MB07] Naveen Muralimanohar and Rajeev Balasubramonian. Interconnect design considerations for large NUCA caches. *ACM SIGARCH Computer Architecture News*, 35(2):369–380, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mittal:2013:EVE

[MBBS13] Aashish Mittal, Dushyant Bansal, Sorav Bansal, and Varun Sethi. Efficient virtualization on embedded Power Architecture(R) platforms. *ACM SIGARCH Computer Architecture News*, 41(1):445–458, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Min:1990:ECS

[MBK90] Sang Lyul Min, Jean-Loup Baer, and Hyoung-Joo Kim. An efficient caching support for critical sections in large-scale shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 18(3b):34–47, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martin:1989:FAM

[MBL+89] A. J. Martin, S. M. Burns, T. K. Lee, D. Borkovic, and P. J. Hazewindus. The first asynchronous microprocessor: the test results. *ACM SIGARCH Computer Architecture News*, 17(4):95–110, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mizrahi:1989:IMS

[MBLZ89] H. E. Mizrahi, J. L. Baer, E. D. Lazowska, and J. Zahorjan. Introducing memory into the switch elements of multiprocessor interconnection networks. *ACM SIGARCH Computer Architecture News*, 17(3):158–166, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moravan:2006:SNT

[MBM+06] Michelle J. Moravan, Jayaram Bobba, Kevin E. Moore, Luke Yen, Mark D. Hill, Ben Liblit, Michael M. Swift, and David A. Wood. Supporting nested transactional memory in logTM. *ACM SIGARCH Computer Architecture News*, 34(5):359–370, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moch:2004:HSM

[MBS+04] S. Moch, M. Bereković, H. J. Stolberg, L. Friebe, M. B. Kulaczewski, A. Dehnhardt, and P. Pirsch. HIBRID-SOC: a multi-core architecture for image and video applications. *ACM SIGARCH Computer Architecture News*, 32 (3):55–61, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukkara:2016:WID

[MBS16] Anurag Mukkara, Nathan Beckmann, and Daniel Sanchez. Whirlpool: Improving dynamic cache management with static data classification. *ACM SIGARCH Computer Architecture News*, 44 (2):113–127, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Moshovos:1997:DSS

[MBVS97] Andreas Moshovos, Scott E. Breach, T. N. Vijaykumar, and Gurindar S. Sohi. Dynamic speculation and synchronization of data dependences. *ACM SIGARCH Computer Architecture News*, 25(2):181–193, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Min:1991:ECB

[MC91] Sang L. Min and Jong-Deok Choi. An efficient cache-based access anomaly detection scheme. *ACM SIGARCH Computer Architecture News*, 19(2):235–244, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Michael:1992:FMB

[MC92] Gavin Michael and Andrew Chien. Future multicomputers: beyond minimalist multiprocessors? *ACM SIGARCH Computer Architecture News*, 20(5):6–12, December 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Menon:1993:AFT

[MC93] Jai Menon and Jim Cortney. The architecture of a fault-tolerant cached RAID controller. *ACM SIGARCH Computer Architecture News*, 21 (2):76–87, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McDonald:2006:ASP

[MCC+06a] Austen McDonald, JaeWoong Chung, Brian D. Carlstrom, Chi Cao Minh, Hassan Chafi, Christos Kozyrakis, and Kunle Olukotun. Architectural semantics for practical transactional memory. *ACM SIGARCH Computer Architecture News*, 34(2):53–65, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mishra:2006:TES

[MCC+06b] Mahim Mishra, Timothy J. Callahan, Tiberiu Chelcea, Girish Venkataramani, Seth C. Goldstein, and Mihai Budiu. Tartan: evaluating spatial computation for whole program execution. *ACM SIGARCH Computer Architecture News*, 34(5):163–174, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McDonell:1977:TNS

[McD77] Ken J. McDonell. Trends in non-software support for input-output functions. *ACM SIGARCH Computer Architecture News*, 6(2):40–47, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McDaniel:1982:AMI

[McD82a] Gene McDaniel. An analysis of a mesa instruction set using dynamic instruction frequencies. *ACM SIGARCH Computer Architecture News*, 10(2):167–176, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McDowell:1982:PML

[McD82b] Charlie McDowell. Protection at the micromachine level. *ACM SIGARCH Computer Architecture News*, 10(1):4–8, January 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McDowell:1988:BRS

[McD88] Charles E. McDowell. Book review: *Supercomputer Architectures* by Paul B. Schneck (Kluwer Academic Publishers). *ACM SIGARCH Computer Architecture News*, 16(4):195–196, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mallik:2008:PMU

[MCD+08] Arindam Mallik, Jack Cosgrove, Robert P. Dick, Gokhan Memik, and Peter Dinda. PICSEL: measuring user-perceived performance to control dynamic frequency scaling. *ACM SIGARCH Computer Architecture News*, 36(1):70–79, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McFarling:1989:POI

[McF89] S. McFarling. Program optimization for instruction caches. *ACM SIGARCH Computer Architecture News*, 17(2):183–191, April 1989. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

McFarling:1992:CRD

[McF92] Scott McFarling. Cache replacement with dynamic exclusion. *ACM SIGARCH Computer Architecture News*, 20(2):191–200, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McGlynn:1978:RCA

[McG78] Daniel R. McGlynn. Review of *Content Addressable Parallel Processors* by Caxton C. Foster. Van Nostrand Reinhold Co. 1976. *ACM SIGARCH Computer Architecture News*, 7(1):23, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Misra:2017:ELT

[MCGL17] Pulkit A. Misra, Jeffrey S. Chase, Johannes Gehrke, and Alvin R. Lebeck. Enabling lightweight transactions with precision time. *ACM SIGARCH Computer Architecture News*, 45(1):779–794, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McKeeman:1974:CDE

[McK74] W. M. McKeeman. Computer design evaluation using programming language primitives. *ACM SIGARCH Computer Architecture News*, 3(1):7–18, March 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mashimo:2016:CEH

[MCK16] Susumu Mashimo, Thiem Van Chu, and Kenji Kise. Cost-effective and high-throughput merge network: Architecture for the fastest FPGA sorting accelerator. *ACM SIGARCH Computer Architecture News*, 44(4):8–13, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mellor-Crummey:1989:SIC

[MCL89] J. M. Mellor-Crummey and T. J. LeBlanc. A software instruction counter. *ACM SIGARCH Computer Architecture News*, 17(2):78–86, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McLaughlin:1990:DFD

[McL90] Robert McLaughlin. Design for fast DSP machine. *ACM SIGARCH Computer Architecture News*, 18(4):62–66, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McLaughlin:1991:LAB

[McL91] Robert McLaughlin. Lookahead branching hardware. *ACM SIGARCH Computer Architecture News*, 19(6):9–11, December 1991. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McMahan:2017:ASF

[MCN+17] Joseph McMahan, Michael Christensen, Lawton Nichols, Jared Roesch, Sung-Yee Guo, Ben Hardekopf, and Timothy Sherwood. An architecture supporting formal and compositional binary analysis. *ACM SIGARCH Computer Architecture News*, 45 (1):177–191, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mellor-Crummey:1991:SC

[MCS91] John M. Mellor-Crummey and Michael L. Scott. Synchronization without contention. *ACM SIGARCH Computer Architecture News*, 19(2):269–278, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Montesinos:2008:DRD

[MCT08] Pablo Montesinos, Luis Ceze, and Josep Torrellas. DeLorean: Recording and deterministically replaying shared-memory multiprocessor execution efficiently. *ACM SIGARCH Computer Architecture News*, 36(3):289–300, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mao:2016:RFR

[MCXS16] Junjie Mao, Yu Chen, Qixue Xiao, and Yuanchun Shi. RID: Finding reference count bugs with inconsistent path pair checking. *ACM SIGARCH Computer Architecture News*, 44(2):531–544, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McNiven:1988:AMR

[MD88] G. D. McNiven and E. S. Davidson. Analysis of memory referencing behavior for design of local memories. *ACM SIGARCH Computer Architecture News*, 16(2):56–63, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mytkowicz:2009:PWD

[MDHS09] Todd Mytkowicz, Amer Diwan, Matthias Hauswirth, and Peter F. Sweeney. Producing wrong data without doing anything obviously wrong! *ACM SIGARCH Computer Architecture News*, 37(1):265–276, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mattson:2000:CS

[MDR+00] Peter Mattson, William J. Dally, Scott Rixner, Ujval J. Kapasi, and John D. Owens. Communication scheduling. *ACM SIGARCH Computer*

Architecture News, 28(5):82–92, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mishra:2011:ACI

[MDS+11] Asit K. Mishra, Xiangyu Dong, Guangyu Sun, Yuan Xie, N. Vijaykrishnan, and Chita R. Das. Architecting on-chip interconnects for stacked 3D STT-RAM caches in CMPs. *ACM SIGARCH Computer Architecture News*, 39(3):69–80, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Martin:2012:TRT

[MDS12a] Robert Martin, John Demme, and Simha Sethumadhavan. TimeWarp: rethinking timekeeping and performance monitoring mechanisms to mitigate side-channel attacks. *ACM SIGARCH Computer Architecture News*, 40(3): 118–129, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Menon:2012:IES

[MDS12b] Jaikrishnan Menon, Marc De Kruijf, and Karthikeyan Sankaralingam. iGPU: exception support and speculative execution on GPUs. *ACM SIGARCH Computer Architecture News*, 40(3): 72–83, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Matsunobu:2011:DCE

[MDSO11] Kohei Matsunobu, Keisuke Dohi, Yuichiro Shibata, and Kiyoshi Oguri. A discussion on calculating eigenvalues of real symmetric tridiagonal matrices on a GPU. *ACM SIGARCH Computer Architecture News*, 39(4):100–101, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mountain:1978:AMC

[ME78] John B. Mountain and Philip H. Enslow. Application of the military computer family architecture selection criteria to the PR1ME P400. *ACM SIGARCH Computer Architecture News*, 6(6):3–17, February 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mefenza:2015:IBM

[MEB15] Michael Mefenza, Nicolas Edwards, and Christophe Bobda. Interface based memory synthesis of image processing applications in FPGA. *ACM SIGARCH Computer Architecture News*, 43(4):64–69, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Melhem:1985:LSS

[Mel85] Rami Melhem. A language for the simulation of systolic architectures. *ACM SIGARCH Computer Architecture News*, 13(3):310–314, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Malik:1992:ILP

[MEV92] Nadeem Malik, Richard J. Eickemeyer, and Stamatis Vassiliadis. Instruction-level parallelism from execution interlock collapsing. *ACM SIGARCH Computer Architecture News*, 20(4):38–43, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mulder:1976:MOD

[MF76] Michael C. Mulder and Patrick P. Fasang. A microprocessor oriented data acquisition and control system for power system control. *ACM SIGARCH Computer Architecture News*, 4(4):74–78, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McCurdy:2005:UPM

[MF05] Collin McCurdy and Charles Fischer. Using Pin as a memory reference generator for multiprocessor simulation. *ACM SIGARCH Computer Architecture News*, 33(5):39–44, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukherjee:1996:CNI

[MFHW96] Shubhendu S. Mukherjee, Babak Falsafi, Mark D. Hill, and David A. Wood. Coherent network interfaces for fine-grain communication. *ACM SIGARCH Computer Architecture News*, 24(2):247–258, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Murakami:1988:OKU

[MFST88] Kazuaki Murakami, Akira Fukuda, Toshinori Sueyoshi, and Shinji Tomita. An overview of the Kyushu University reconfigurable parallel processor. *ACM SIGARCH Computer Architecture News*, 16(4):130–137, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Morris:1991:CER

[MG91] Todd D. Morris and Edward F. Gehringer. A cost-effective reliable multipath interconnection network. *ACM SIGARCH Computer Architecture News*, 19(4):45–65, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Morin:1996:COB

[MGBK96] Christine Morin, Alain Gefflaut, Michel Banâtre, and Anne-Marie Kermarrec. COMA:

an opportunity for building fault-tolerant scalable shared memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 24 (2):56–65, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Maquelin:1996:PWC

[MGH+96] Olivier Maquelin, Guang R. Gao, Herbert H. J. Hum, Kevin B. Theobald, and Xin-Min Tian. Polling watchdog: combining polling and interrupts for efficient message handling. *ACM SIGARCH Computer Architecture News*, 24(2):179–188, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mashtizadeh:2017:TPD

[MGT+17] Ali José Mashtizadeh, Tal Garfinkel, David Terei, David Mazieres, and Mendel Rosenblum. Towards practical default-on multi-core record/ replay. *ACM SIGARCH Computer Architecture News*, 45 (1):693–708, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Meisner:2009:PES

[MGW09] David Meisner, Brian T. Gold, and Thomas F. Wenisch. PowerNap: eliminating server idle power. *ACM SIGARCH Computer Architecture News*, 37 (1):205–216, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McFarling:1986:RCB

[MH86] S. McFarling and J. Hennesey. Reducing the cost of branches. *ACM SIGARCH Computer Architecture News*, 14(2):396–403, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukherjee:1998:UPA

[MH98] Shubhendu S. Mukherjee and Mark D. Hill. Using prediction to accelerate coherence protocols. *ACM SIGARCH Computer Architecture News*, 26(3):179–190, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marty:2007:VHS

[MH07] Michael R. Marty and Mark D. Hill. Virtual hierarchies to support server consolidation. *ACM SIGARCH Computer Architecture News*, 35(2):46–56, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mahram:2013:NBC

[MH13] Atabak Mahram and Martin C. Herbordt. NCBI BLASTP on the Convey HC1-EX. *ACM SIGARCH Computer Architecture News*, 41 (5):41–46, December 2013. CODEN CANED2. ISSN

0163-5964 (print), 1943-5851 (electronic).

Mukundan:2013:UMR

[MHhK+13] Janani Mukundan, Hillery Hunter, Kyu hyoun Kim, Jeffrey Stuecheli, and José F. Martínez. Understanding and mitigating refresh overheads in high-density DDR4 DRAM systems. *ACM SIGARCH Computer Architecture News*, 41(3):48–59, June 2013. ICSA '13 conference proceedings.

Montesinos:2009:CSH

[MHKT09] Pablo Montesinos, Matthew Hicks, Samuel T. King, and Josep Torrellas. Capo: a software-hardware interface for practical deterministic multiprocessor replay. *ACM SIGARCH Computer Architecture News*, 37(1): 73–84, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mahlke:1995:CFP

[MHM+95] Scott A. Mahlke, Richard E. Hank, James E. McCormick, David I. August, and Wen-Mei W. Hwu. A comparison of full and partial predicated execution support for ILP processors. *ACM SIGARCH Computer Architecture News*, 23(2):138–150, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martin:2003:UDS

[MHS+03] Milo M. K. Martin, Pacia J. Harper, Daniel J. Sorin, Mark D. Hill, and David A. Wood. Using destination-set prediction to improve the latency/bandwidth tradeoff in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 31(2):206–217, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martin:2003:TCD

[MHW03] Milo M. K. Martin, Mark D. Hill, and David A. Wood. Token coherence: decoupling performance and correctness. *ACM SIGARCH Computer Architecture News*, 31(2):182–193, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Michael:1992:DBC

[Mic92] Wisam Michael. Directory-based cache coherency protocol for a ring-connected multiprocessor-array. *ACM SIGARCH Computer Architecture News*, 20(2):437, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Middelburg:1982:EPA

[Mid82] C. A. Middelburg. The effect of the PDP-11 architecture on code generation for chill. *ACM SIGARCH*

Computer Architecture News, 10(2):149–157, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miller:1977:BRRb

[Mil77a] Edward F. Miller. Book reviews: Review of *High-Level Language Computer Architecture* by Yaohan Chu. Academic Press, New York, 1975. *ACM SIGARCH Computer Architecture News*, 5(6): 29, February 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miller:1977:BRR

[Mil77b] Edward F. Miller, Jr. Book review: Review of *Large-Scale Computer Architecture: Parallel and Associative Processors* by Kenneth J. Thurber, Hayden Book Company, Rochelle Park, New Jersey 1976. *ACM SIGARCH Computer Architecture News*, 5(8):17, April 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miller:1982:HMD

[Mil82] Leslie Jill Miller. A heterogeneous multiprocessor design and the distributed scheduling of its task group workload. *ACM SIGARCH Computer Architecture News*, 10(3):283–290, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mills:1987:CGR

[Mil87] Jonathan W. Mills. Coming to grips with a RISC: a report of the progress of the LOW RISC design group. *ACM SIGARCH Computer Architecture News*, 15(1):53–62, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Morisita:2010:IEA

[MIO+10] Hirokazu Morisita, Kenta Inakagata, Yasunori Osana, Naoyuki Fujita, and Hideharu Amano. Implementation and evaluation of an arithmetic pipeline on FLOPS-2D: multi-FPGA system. *ACM SIGARCH Computer Architecture News*, 38(4):8–13, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Murakami:1989:SSI

[MIT89] K. Murakami, N. Irie, and S. Tomita. SIMP (single instruction stream/multiple instruction pipelining): a novel high-speed single-processor architecture. *ACM SIGARCH Computer Architecture News*, 17(3):78–85, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miya:1985:MDP

[Miy85] E. N. Miya. Multiprocessor/distributed processing bibliography (in machine-readable form). *ACM SIGARCH Computer Architecture News*, 13(1):27–29, March 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moskowitz:1989:AMM

[MJ89] J. P. Moskowitz and C. Jousselin. An algebraic memory model. *ACM SIGARCH Computer Architecture News*, 17(1):55–62, March 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mirghafori:1995:TSB

[MJP95] Nikki Mirghafori, Margret Jacoby, and David Patterson. Truth in SPEC benchmarks. *ACM SIGARCH Computer Architecture News*, 23(5):34–42, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ma:2011:DER

[MJW11] Sheng Ma, Natalie Enright Jerger, and Zhiying Wang. DBAR: an efficient routing algorithm to support multiple concurrent applications in networks-on-chip. *ACM SIGARCH Computer Architecture News*, 39(3): 413–424, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ma:1984:ARS

[MK84] Y. W. Ma and R. Krishnamurti. The architecture of Replica: a special-purpose computer system for active multi-sensory perception of 3-dimensional objects. *ACM SIGARCH Computer Architecture News*, 12(3):30–37, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moffie:2005:AAS

[MK05] Micha Moffie and David Kaeli. ASM: application security monitor. *ACM SIGARCH Computer Architecture News*, 33(5):21–26, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Meyer:2011:MRP

[MK11] Dominik Meyer and Bernd Klauer. Multicore reconfiguration platform an alternative to RAMPSoC. *ACM SIGARCH Computer Architecture News*, 39(4):102–103, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mars:2012:BDS

[MK12] Jason Mars and Naveen Kumar. BlockChop: dynamic squash elimination for hybrid processor architecture. *ACM SIGARCH Computer Architecture News*, 40(3):

536–547, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Manne:1998:PGS

[MKG98] Srilatha Manne, Artur Klauser, and Dirk Grunwald. Pipeline gating: speculation control for energy reduction. *ACM SIGARCH Computer Architecture News*, 26(3):132–141, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Magaki:2016:ACS

[MKGT16] Ikuo Magaki, Moein Khazraee, Luis Vega Gutierrez, and Michael Bedford Taylor. ASIC clouds: specializing the datacenter. *ACM SIGARCH Computer Architecture News*, 44 (3):178–190, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Morano:2003:RHI

[MKKU03] D. Morano, A. Khalafi, D. R. Kaeli, and A. K. Uht. Realizing high IPC through a scalable memory-latency tolerant multipath microarchitecture. *ACM SIGARCH Computer Architecture News*, 31(1):16–25, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Murakami:1983:RDB

[MKM+83] Kunio Murakami, Takeo Kakuta, Nobuyoshi Miyazaki, Shigeki Shibayama, and Haruo Yokota. A relational data base machine: First step to knowledge base machine. *ACM SIGARCH Computer Architecture News*, 11(3):423–425, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mutlu:2005:TEP

[MKP05] Onur Mutlu, Hyesoon Kim, and Yale N. Patt. Techniques for efficient processing in runahead execution engines. *ACM SIGARCH Computer Architecture News*, 33(2):370–381, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukherjee:2002:DDE

[MKR02] Shubhendu S. Mukherjee, Michael Kontz, and Steven K. Reinhardt. Detailed design and evaluation of redundant multithreading alternatives. *ACM SIGARCH Computer Architecture News*, 30(2):99–110, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McGregor:2005:PCK

[ML05] John P. McGregor and Ruby B. Lee. Protecting cryptographic keys and computations via virtual secure coprocessing. *ACM SIGARCH Computer*

Architecture News, 33(1):16–26, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Madriles:2009:BST

[MLC+09] Carlos Madriles, Pedro López, Josep M. Codina, Enric Gibert, Fernando Latorre, Alejandro Martinez, Raúl Martinez, and Antonio Gonzalez. Boosting single-thread performance in multi-core systems through fine-grain multi-threading. *ACM SIGARCH Computer Architecture News*, 37(3):474–483, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ma:2011:SPC

[MLCW11] Kai Ma, Xue Li, Ming Chen, and Xiaorui Wang. Scalable power control for many-core architectures running multi-threaded applications. *ACM SIGARCH Computer Architecture News*, 39 (3):449–460, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Malladi:2012:TEP

[MLN+12] Krishna T. Malladi, Benjamin C. Lee, Frank A. Nothaft, Christos Kozyrakis, Karthika Periyathambi, and Mark Horowitz. Towards energy-proportional datacenter memory with mobile DRAM. *ACM SIGARCH Computer Architecture News*, 40(3):37–48, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Mudge:1982:PAC

[MM82] T. N. Mudge and B. A. Makrucki. Probabilistic analysis of a crossbar switch. *ACM SIGARCH Computer Architecture News*, 10(3):311–320, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Marczynski:1983:DDS

[MM83] R. W. Marczyński and J. Milewski. A data driven system based on a microprogrammed processor module. *ACM SIGARCH Computer Architecture News*, 11(3):98–106, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moore:1987:BDN

[MM87] Matthew Moore and Charles McDowell. Bi-directional networks for large parallel processors. *ACM SIGARCH Computer Architecture News*, 15 (3):3–4, June 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Menon:1992:CSA

[MM92] Jai Menon and Dick Mattson. Comparison of sparing alternatives for disk arrays. *ACM*

SIGARCH Computer Architecture News, 20(2):318–329, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mutlu:2008:PAB

[MM08] Onur Mutlu and Thomas Moscibroda. Parallelism-aware batch scheduling: Enhancing both performance and fairness of shared DRAM systems. *ACM SIGARCH Computer Architecture News*, 36 (3):63–74, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moscibroda:2009:CBR

[MM09] Thomas Moscibroda and Onur Mutlu. A case for bufferless routing in on-chip networks. *ACM SIGARCH Computer Architecture News*, 37(3):196–207, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mondal:2014:DSM

[MM14a] Subijit Mondal and Subhashis Maitra. Data security-modified AES algorithm and its applications. *ACM SIGARCH Computer Architecture News*, 42(2):1–8, May 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Morishima:2014:PEG

[MM14b] Shin Morishima and Hiroki Matsutani. Performance evaluations of graph database using CUDA and OpenMP compatible libraries. *ACM SIGARCH Computer Architecture News*, 42(4):75–80, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mesa-Martinez:2010:CPT

[MMAR10] Francisco Javier Mesa-Martinez, Ehsan K. Ardestani, and Jose Renau. Characterizing processor thermal behavior. *ACM SIGARCH Computer Architecture News*, 38(1):193–204, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mysore:2008:UVF

[MMAS08] Shashidhar Mysore, Bita Mazloom, Banit Agrawal, and Timothy Sherwood. Understanding and visualizing full systems with data flow tomography. *ACM SIGARCH Computer Architecture News*, 36(1):211–221, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Milenkovic:2005:UIB

[MMJ05] Milena Milenković, Aleksandar Milenković, and Emil Jovanov. Using instruction block signatures to counter code injection attacks. *ACM SIGARCH Computer Architecture News*, 33(1):108–117, March 2005. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mesa-Martinez:2007:PMV

[MMNBR07] Francisco Javier Mesa-Martinez, Joseph Nayfach-Battilana, and Jose Renau. Power model validation through thermal measurements. *ACM SIGARCH Computer Architecture News*, 35(2):302–311, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martignoni:2012:PEL

[MMP+12] Lorenzo Martignoni, Stephen McCamant, Pongsin Poosankam, Dawn Song, and Petros Maniatis. Path-exploration lifting: hi-fi tests for lo-fi emulators. *ACM SIGARCH Computer Architecture News*, 40 (1):337–348, March 2012. ASPLOS '12 conference proceedings.

Madhavapeddy:2013:ULO

[MMR+13] Anil Madhavapeddy, Richard Mortier, Charalampos Rotsos, David Scott, Balraj Singh, Thomas Gazagnaire, Steven Smith, Steven Hand, and Jon Crowcroft. Unikernels: library operating systems for the cloud. *ACM SIGARCH Computer Architecture News*, 41(1):461–472, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mytkowicz:2014:DPF

[MMS14] Todd Mytkowicz, Madanlal Musuvathi, and Wolfram Schulte. Data-parallel finite-state machines. *ACM SIGARCH Computer Architecture News*, 42(1):529–542, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Markuze:2016:TIP

[MMT16] Alex Markuze, Adam Morrison, and Dan Tsafrir. True IOMMU protection from DMA attacks: When copy is faster than zero copy. *ACM SIGARCH Computer Architecture News*, 44(2):249–262, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Michael:1997:CCA

[MNLS97] Maged M. Michael, Ashwini K. Nanda, Beng-Hong Lim, and Michael L. Scott. Coherence controller architectures for SMP-based CC-NUMA multiprocessors. *ACM SIGARCH Computer Architecture News*, 25(2):219–228, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mitsuishi:2014:ABF

[MNS+14] Takuji Mitsuishi, Shimpei Nomura, Jun Suzuki, Yuki Hayashi, Masaki Kan, and Hideharu Amano. Accelerating breadth first search on

GPU–BOX. *ACM SIGARCH Computer Architecture News*, 42(4):81–86, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Moto-oka:1983:OFG

[Mo83] Tohru Moto-oka. Overview to the Fifth Generation Computer System project. *ACM SIGARCH Computer Architecture News*, 11(3):417–422, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moon:1985:AS

[Moo85] David A. Moon. Architecture of the Symbolics 3600. *ACM SIGARCH Computer Architecture News*, 13(3):76–83, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moshovos:2005:REC

[Mos05] Andreas Moshovos. RegionScout: Exploiting coarse grain sharing in snoop-based coherence. *ACM SIGARCH Computer Architecture News*, 33(2):234–245, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moudgill:1998:TFS

[Mou98] Mayan Moudgill. Techniques for fast simulation of associative cache directories. *ACM SIGARCH Computer Architecture News*, 26(2):1–8, May 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Malkawi:1986:PMP

[MP86] M. I. Malkawi and J. H. Patel. Performance measurement of paging behavior in multiprogramming systems. *ACM SIGARCH Computer Architecture News*, 14(2):111–118, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Melvin:1991:EFG

[MP91] Stephen Melvin and Yale Patt. Exploiting fine-grained parallelism through a combination of hardware and software techniques. *ACM SIGARCH Computer Architecture News*, 19(3):287–296, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Malik:2012:ERA

[MPH12] Jamshaid Sarwar Malik, Paolo Palazzari, and Ahmed Hemani. Effort, resources, and abstraction vs performance in high-level synthesis: finding new answers to an old question. *ACM SIGARCH Computer Architecture News*, 40(5):64–69, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Mai:2000:SMM

[MPJ+00] Ken Mai, Tim Paaske, Nuwan Jayasena, Ron Ho, William J. Dally, and Mark Horowitz. Smart Memories: a modular reconfigurable architecture. *ACM SIGARCH Computer Architecture News*, 28(2):161–171, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Muthukaruppan:2014:PTB

[MPM14] Thannirmalai Somu Muthukaruppan, Anuj Pathania, and Tulika Mitra. Price theory based power management for heterogeneous multicores. *ACM SIGARCH Computer Architecture News*, 42 (1):161–176, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McCune:2008:HLC

[MPP+08] Jonathan M. McCune, Bryan Parno, Adrian Perrig, Michael K. Reiter, and Arvind Seshadri. How low can you go?: recommendations for hardware-supported minimal TCB code execution. *ACM SIGARCH Computer Architecture News*, 36(1):14–25, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Magenheimer:1987:IMD

[MPPZ87] Daniel J. Magenheimer, Liz Peters, Karl Pettis, and Dan Zuras. Integer multiplication and division on the HP precision architecture. *ACM SIGARCH Computer Architecture News*, 15(5):90–99, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mendelson:1989:SCC

[MPS89] A. Mendelson, D. K. Pradhan, and A. D. Singh. A single cached copy data coherence scheme for multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 17(6):36–49, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mendlson:1994:CTI

[MPS94] Abraham Mendlson, Shlomit S. Pinter, and Ruth Shtokhamer. Compile time instruction cache optimizations. *ACM SIGARCH Computer Architecture News*, 22(1):44–51, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moore:1987:CSV

[MPSB87] B. Moore, A. Padegs, R. Smith, and W. Buchholz. Concepts of the System/370 vector architecture. *ACM SIGARCH Computer Architecture News*, 15(2):282–288, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mulder:1989:AFA

[MPSiV89] J. M. Mulder, R. J. Portier, A. Srivastava, and R. in't Velt. An architecture framework for application-specific and scalable architectures. *ACM SIGARCH Computer Architecture News*, 17(3):362–369, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Monchiero:2006:EST

[MPSV06] Matteo Monchiero, Gianluca Palermo, Cristina Silvano, and Oreste Villa. An efficient synchronization technique for multiprocessor systems on-chip. *ACM SIGARCH Computer Architecture News*, 34 (1):33–40, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Maa:1991:TED

[MPT91] Yeong-Chang Maa, Dhiraj K. Pradhan, and Dominique Thiébaut. Two economical directory schemes for large-scale cache coherent multiprocessors. *ACM SIGARCH Computer Architecture News*, 19(5):10, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mai:2013:VSI

[MPX+13] Haohui Mai, Edgar Pek, Hui Xue, Samuel Talmadge King, and Parthasarathy Madhusudan. Verifying security invariants in ExpressOS. *ACM SIGARCH Computer Architecture News*, 41(1):293–304, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Malony:1990:HBP

[MR90] Allen D. Malony and Daniel A. Reed. A hardware-based performance monitor for the Intel iPSC/2 hypercube. *ACM SIGARCH Computer Architecture News*, 18(3b):213–226, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Manikantan:2012:PSC

[MRG12] R. Manikantan, Kaushik Rajan, and R. Govindarajan. Probabilistic Shared Cache Management (PriSM). *ACM SIGARCH Computer Architecture News*, 40(3): 428–439, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Muralidharan:2016:AAC

[MRH+16] Saurav Muralidharan, Amit Roy, Mary Hall, Michael Garland, and Piyush Rai. Architecture-adaptive code variant tuning. *ACM SIGARCH Computer Architecture News*, 44(2):325–338, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McGill:1976:MAN

[MS76] Robert McGill and John Steinhoff. A multimicroprocessor approach to numerical analysis: An application to gaming problems. *ACM SIGARCH Computer Architecture News*, 4(4):46–51, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McMillen:1980:MMC

[MS80] Robert J. McMillen and Howard Jay Siegel. MIMD machine communication using the augmented data manipulator network. *ACM SIGARCH Computer Architecture News*, 8(3):51–60, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McMillen:1982:PFT

[MS82] Robert J. McMillen and Howard Jay Siegel. Performance and fault tolerance improvements in the Inverse Augmented Data Manipulator network. *ACM SIGARCH Computer Architecture News*, 10(3):63–72, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Moeller:1984:PPP

[MS84] W. D. Moeller and G. Sandweg. The peripheral processor PP4, a highly regular VLSI processor. *ACM SIGARCH Computer Architecture News*, 12(3):312–318, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mendelson:1987:MDF

[MS87] B. Mendelson and G. M. Silberman. Mapping data flow programs on a VLSI array of processors. *ACM SIGARCH Computer Architecture News*, 15(2):72–80, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Meixner:2005:DVS

[MS05] Albert Meixner and Daniel J. Sorin. Dynamic verification of sequential consistency. *ACM SIGARCH Computer Architecture News*, 33(2):482–493, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miyoshi:2007:FGC

[MS07] Takefumi Miyoshi and Nobuhiko Sugino. Fine-grain compensation method with consideration of trade-offs between computation and data transfer for power consumption. *ACM SIGARCH Computer Architecture News*, 35(5):39–44, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukherjee:2010:NAC

[MS10] Manideepa Mukherjee and Amitabha Sinha. A novel architecture for conversion of binary to single digit double base numbers. *ACM SIGARCH Computer Architecture News*, 38(5):1–6, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Maitra:2012:NAC

[MS12] Subhashis Maitra and Amitabha Sinha. A new algorithm for computing triple-base number system. *ACM SIGARCH Computer Architecture News*, 40(4):3–9, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Maitra:2013:DSM

[MS13a] Subhashis Maitra and Amitabha Sinha. Design and simulation of MAC unit using combinational circuit and adder. *ACM SIGARCH Computer Architecture News*, 41(5):25–33, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Maitra:2013:HEM

[MS13b] Subhashis Maitra and Amitabha Sinha. High efficiency MAC unit used in digital signal processing and elliptic curve cryptography. *ACM SIGARCH Computer Architecture News*, 41(4):1–7, September 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Maitra:2013:HPM

[MS13c] Subhashis Maitra and Amitabha Sinha. High performance MAC unit for DSP and cryptographic applications. *ACM SIGARCH Computer Architecture News*, 41(2):47–55, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Matveev:2015:RHN

[MS15] Alexander Matveev and Nir Shavit. Reduced hardware NOrec: a safe and scalable hybrid transactional memory. *ACM SIGARCH Computer Architecture News*, 43 (1):59–71, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Martin:2000:TSA

[MSA+00] Milo M. K. Martin, Daniel J. Sorin, Anastassia Ailamaki, Alaa R. Alameldeen, Ross M. Dickson, Carl J. Mauer, Kevin E. Moore, Manoj Plakal, Mark D. Hill, and David A. Wood. Timestamp snooping: an approach for extending SMPs. *ACM SIGARCH Computer Architecture News*, 28(5):25–36, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mangione-Smith:1991:VRD

[MSAD91] William Mangione-Smith, Santosh G. Abraham, and Edward S. Davidson. Vector register design for polycyclic vector scheduling. *ACM SIGARCH Computer Architecture News*, 19(2):154–163, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mukherjee:2002:CSA

[MSB+02] Shubhendu S. Mukherjee, Federico Silla, Peter Bannon, Joel Emer, Steve Lang, and David Webb. A comparative study of arbitration algorithms for the Alpha 21364 pipelined router. *ACM SIGARCH Computer Architecture News*, 30(5):223–234, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martin:2005:MGE

[MSB+05] Milo M. K. Martin, Daniel J. Sorin, Bradford M. Beckmann, Michael R. Marty, Min Xu, Alaa R. Alameldeen, Kevin E. Moore, Mark D. Hill, and David A. Wood. Multifacet's general execution-driven multiprocessor simulator (GEMS) toolset. *ACM SIGARCH Computer Architecture News*, 33(4):92–99, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Meisner:2011:PMO

[MSB+11] David Meisner, Christopher M. Sadler, Luiz André Barroso, Wolf-Dietrich Weber, and Thomas F. Wenisch. Power management of online data-intensive services. *ACM SIGARCH Computer Architecture News*, 39(3): 319–330, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Muscat:2013:DBM

[MSCS13] Richard A. Muscat, Karin Strauss, Luis Ceze, and Georg Seelig. DNA-based molecular architecture with spatially localized components. *ACM SIGARCH Computer Architecture News*, 41(3):177–188, June 2013. ICSA '13 conference proceedings.

Mitsuishi:2015:BFS

[MSH+15] Takuji Mitsuishi, Jun Suzuki, Yuki Hayashi, Masaki Kan, and Hideharu Amano. Breadth first search on cost-efficient multi-GPU systems. *ACM SIGARCH Computer Architecture News*, 43(4):58–63, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Maekawa:1982:FSA

[MSI82] Mamoru Maekawa, Ken Sakamura, and Chiaki Ishikawa. Firmware structure and architectural support for monitors, vertical migration and user microprogramming. *ACM SIGARCH Computer Architecture News*, 10(2):185–

194, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mercaldi:2006:IST

[MSP+06] Martha Mercaldi, Steven Swanson, Andrew Petersen, Andrew Putnam, Andrew Schwerin, Mark Oskin, and Susan J. Eggers. Instruction scheduling for a tiled dataflow architecture. *ACM SIGARCH Computer Architecture News*, 34(5):141–150, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Muzahid:2009:SSB

[MSQT09] Abdullah Muzahid, Dario Suárez, Shanxiang Qi, and Josep Torrellas. SigRace: signature-based data race detection. *ACM SIGARCH Computer Architecture News*, 37(3):337–348, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Magklis:2003:PBD

[MSS+03] Grigorios Magklis, Michael L. Scott, Greg Semeraro, David H. Albonesi, and Steven Dropsho. Profile-based dynamic voltage and frequency scaling for a multiple clock domain microprocessor. *ACM SIGARCH Computer Architecture News*, 31(2):14–27, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Madhavan:2014:RLH

[MSS14a] Advait Madhavan, Timothy Sherwood, and Dmitri Strukov. Race logic: a hardware acceleration for dynamic programming algorithms. *ACM SIGARCH Computer Architecture News*, 42(3):517–528, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Menychtas:2014:DSF

[MSS14b] Konstantinos Menychtas, Kai Shen, and Michael L. Scott. Disengaged scheduling for fair, protected access to fast computational accelerators. *ACM SIGARCH Computer Architecture News*, 42(1):301–316, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ma:2015:SDS

[MSS+15] Jiuyue Ma, Xiufeng Sui, Ninghui Sun, Yupeng Li, Zihao Yu, Bowen Huang, Tianni Xu, Zhicheng Yao, Yun Chen, Haibin Wang, Lixin Zhang, and Yungang Bao. Supporting differentiated services in computers via programmable architecture for resourcing-on-demand (PARD). *ACM SIGARCH Computer Architecture News*, 43(1):131–143, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Moalla:1976:DTM

[MSSZ76] M. Moalla, G. Saucier, J. Sifakis, and M. Zachariades. A design tool for the multilevel description and simulation of systems of interconnected modules. *ACM SIGARCH Computer Architecture News*, 4(4):20–27, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

McLear:1982:GCD

[MST82] R. E. McLear, D. M. Scheibelhut, and E. Tammaru. Guidelines for creating a debuggable processor. *ACM SIGARCH Computer Architecture News*, 10(2):100–106, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Malita:2007:MMC

[MŞT07] Mihaela Maliţa, Gheorghe Ştefan, and Dominique Thiébaut. Not multi-, but many-core: designing integral parallel architectures for embedded computation. *ACM SIGARCH Computer Architecture News*, 35(5):32–38, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Michaud:1997:TCC

[MSU97] Pierre Michaud, André Seznec, and Richard Uhlig. Trading conflict and capacity aliasing in conditional branch predictors. *ACM SIGARCH Computer Architecture News*, 25(2):292–303, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Menon:2009:TSA

[MSZ09] Aravind Menon, Simon Schubert, and Willy Zwaenepoel. TwinDrivers: semi-automatic derivation of fast and safe hypervisor network drivers from guest OS drivers. *ACM SIGARCH Computer Architecture News*, 37(1):301–312, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mehrotra:1984:STD

[MT84] Ravi Mehrotra and Sarosh N. Talukdar. Scheduling of tasks for distributed processors. *ACM SIGARCH Computer Architecture News*, 12(3):263–270, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martin:1997:SCM

[MT97] I. Martín and F. Tirado. A SIMD computer for multigrid methods. *ACM SIGARCH Computer Architecture News*, 25(1):13–18, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Martinez:2002:SSA

[MT02] José F. Martínez and Josep Torrellas. Speculative synchronization: applying thread-level speculation to explicitly parallel applications. *ACM SIGARCH Computer Architecture News*, 30(5):18–29, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mars:2013:WMH

[MT13] Jason Mars and Lingjia Tang. Whare-map: heterogeneity in "homogeneous" warehouse-scale computers. *ACM SIGARCH Computer Architecture News*, 41(3):619–630, June 2013. ICSA '13 conference proceedings.

Minh:2007:EHT

[MTC+07] Chi Cao Minh, Martin Trautmann, JaeWoong Chung, Austen McDonald, Nathan Bronson, Jared Casper, Christos Kozyrakis, and Kunle Olukotun. An effective hybrid transactional memory system with strong isolation guarantees. *ACM SIGARCH Computer Architecture News*, 35 (2):69–80, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Merten:1999:HDP

[MTG+99] Matthew C. Merten, Andrew R. Trick, Christopher N. George, John C. Gyllenhaal, and Wen mei W. Hwu. A hardware-driven profiling scheme for identifying program hot spots to support runtime optimization. *ACM SIGARCH Computer Architecture News*, 27(2):136–147, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Merten:2000:HMD

[MTN+00] Matthew C. Merten, Andrew R. Trick, Erik M. Nystrom, Ronald D. Barnes, and Wen mei W. Hmu. A hardware mechanism for dynamic extraction and relayout of program hot spots. *ACM SIGARCH Computer Architecture News*, 28(2):59–70, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Miller:2012:VCE

[MTPT12] Timothy N. Miller, Renji Thomas, Xiang Pan, and Radu Teodorescu. VRSync: characterizing and eliminating synchronization-induced voltage emergencies in many-core processors. *ACM SIGARCH Computer Architecture News*, 40(3):249–260, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Meng:2010:DWS

[MTS10] Jiayuan Meng, David Tarjan, and Kevin Skadron. Dynamic warp subdivision for integrated branch and memory divergence tolerance. *ACM SIGARCH Computer Architecture News*, 38(3):235–

246, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Momeni:2015:EEO

[MTU+15] Amir Momeni, Hamed Tabkhi, Yash Ukidave, Gunar Schirner, and David Kaeli. Exploring the efficiency of the OpenCL pipe semantic on an FPGA. *ACM SIGARCH Computer Architecture News*, 43(4):52–57, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

McFarlin:2013:DDO

[MTZ13] Daniel S. McFarlin, Charles Tucker, and Craig Zilles. Discerning the dominant out-of-order performance advantage: is it speculation or dynamism? *ACM SIGARCH Computer Architecture News*, 41(1):241–252, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mudge:1980:BRR

[Mud80] Trevor Mudge. Book reviews: Review of *The Structure of Computers and Computation, Vol. I* by David J. Kuck, John Wiley & and Sons 1978. *ACM SIGARCH Computer Architecture News*, 8(6): 44–45, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mudge:1996:RPH

[Mud96] Trevor Mudge. Report on the panel: "How Can Computer Architecture Researchers Avoid Becoming the Society for Irreproducible Results?". *ACM SIGARCH Computer Architecture News*, 24(1):1–5, March 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mueller:2012:ABA

[Mue12] Conrad Mueller. Axiom based architecture. *ACM SIGARCH Computer Architecture News*, 40(2):10–17, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mukherjee:1997:WSG

[Muk97] Shubhendu S. Mukherjee. What should graduate students know before joining a large computer architecture project? *ACM SIGARCH Computer Architecture News*, 25(1):23–26, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mulder:1989:DBR

[Mul89] H. Mulder. Data buffering: run-time versus compile-time support. *ACM SIGARCH Computer Architecture News*, 17(2):144–151, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Musoll:2009:LSO

[Mus09a] Enric Musoll. Leakage-saving opportunities in mesh-based massive multi-core architectures. *ACM SIGARCH Computer Architecture News*, 37(5):1–7, December 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Musoll:2009:MBM

[Mus09b] Enric Musoll. Mesh-based many-core performance under process variations: a core yield perspective. *ACM SIGARCH Computer Architecture News*, 37(4):27–34, September 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mullapudi:2015:PAO

[MVB15] Ravi Teja Mullapudi, Vinay Vasista, and Uday Bondhugula. PolyMage: Automatic optimization for image processing pipelines. *ACM SIGARCH Computer Architecture News*, 43(1):429–443, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Martin:1997:ECL

[MVCA97] Richard P. Martin, Amin M. Vahdat, David E. Culler, and Thomas E. Anderson. Effects of communication latency, overhead, and bandwidth in a cluster architecture. *ACM SIGARCH Computer Architecture News*, 25 (2):85–97, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mishra:2011:CHC

[MVD11] Asit K. Mishra, N. Vijaykrishnan, and Chita R. Das. A case for heterogeneous on-chip interconnects for CMPs. *ACM SIGARCH Computer Architecture News*, 39(3): 389–400, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Munsil:1998:RSU

[MW98] Wes Munsil and Chia-Jiu Wang. Reducing stack usage in Java bytecode execution. *ACM SIGARCH Computer Architecture News*, 26(1):7–11, March 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Meisner:2012:DAS

[MW12] David Meisner and Thomas F. Wenisch. DreamWeaver: architectural support for deep sleep. *ACM SIGARCH Computer Architecture News*, 40 (1):313–324, March 2012. ASPLOS '12 conference proceedings.

Hwu:1998:RIA

[mWH98] Wen mei W. Hwu. Retrospective: Impact: an architectural framework for multiple-instruction issue. In

ACM [ACM98a], pages 77–79. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Hwu:1998:RHH

[mWHP98] Wen mei W. Hwu and Yale N. Patt. Retrospective: HPSm, a high performance restricted data flow architecture having minimal functionality. In ACM [ACM98a], pages 43–44. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Mullins:2004:LLV

[MWM04] Robert Mullins, Andrew West, and Simon Moore. Low-latency virtual-channel routers for on-chip networks. *ACM SIGARCH Computer Architecture News*, 32(2): 188, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mahesri:2007:HSS

[MWP07] Aqeel Mahesri, Nicholas J. Wang, and Sanjay J. Patel. Hardware support for software controlled multithreading. *ACM SIGARCH Computer Architecture News*, 35 (1):3–12, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Morioka:1989:EMS

[MYB89] M. Morioka, S. Yamaguchi, and T. Bandoh. Evaluation of memory system for integrated Prolog processor IPP. *ACM SIGARCH Computer Architecture News*, 17(3):203–210, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Myers:1977:CAS

[Mye77] Glenford J. Myers. The case against stack-oriented instruction sets. *ACM SIGARCH Computer Architecture News*, 6(3):7–10, August 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Mahajan:2016:TSG

[MYP+16] Divya Mahajan, Amir Yazdanbakhsh, Jongse Park, Bradley Thwaites, and Hadi Esmaeilzadeh. Towards statistical guarantees in controlling quality tradeoffs for approximate acceleration. *ACM SIGARCH Computer Ar-*

chitecture News, 44(3):66–77, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Mishra:2015:PGM

[MZLH15] Nikita Mishra, Huazhe Zhang, John D. Lafferty, and Henry Hoffmann. A probabilistic graphical model-based approach for minimizing energy under performance constraints. *ACM SIGARCH Computer Architecture News*, 43(1):267–281, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Norton:1983:AIM

[NA83] Richard L. Norton and Jacob A. Abraham. Adaptive interpretation as a means of exploiting complex instruction sets. *ACM SIGARCH Computer Architecture News*, 11(3):277–282, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nikolopoulos:2001:EMA

[NAAL01] D. S. Nikolopoulos, E. Artiaga, E. Ayguadé, and J. Labarta. Exploiting memory affinity in OpenMP through schedule reuse. *ACM SIGARCH Computer Architecture News*, 29(5):49–55, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Naderi:1988:MPEa

[Nad88a] M. Naderi. Modelling and performance evaluation of multiprocessors organization with shared memories. *ACM SIGARCH Computer Architecture News*, 16(4):51–74, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Naderi:1988:MPEb

[Nad88b] M. Naderi. Modelling and performance evaluation of multiprocessors, organizations with multi-memory units. *ACM SIGARCH Computer Architecture News*, 16(5):35–51, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Naedel:1985:CCA

[Nae85] Dick Naedel. Closely coupled asynchronous hierarchical and parallel processing in an open architecture. *ACM SIGARCH Computer Architecture News*, 13(3):215–220, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nakajima:2001:MCS

[Nak01] Tatsuo Nakajima. A middleware component supporting flexible user interaction for networked home appliances. *ACM SIGARCH Computer Architecture News*, 29(5):68–75, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Napolitano:1986:CAD

[Nap86] L. M. Napolitano, Jr. A computer architecture for dynamic finite element analysis. *ACM SIGARCH Computer Architecture News*, 14(2):316–323, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Najaf-abadi:2007:ACE

[NaR07] Hashem H. Najaf-abadi and Eric Rotenberg. Architectural *contesting*: exposing and exploiting temperamental behavior. *ACM SIGARCH Computer Architecture News*, 35 (3):28–35, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nowatzyk:1995:CNW

[NBKP95] Andreas G. Nowatzyk, Michael C. Browne, Edmund J. Kelly, and Michael Parkin. S-connect: from networks of workstations to supercomputer performance. *ACM SIGARCH Computer Architecture News*, 23(2):71–82, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Naeem:2009:SRC

[NCLJ09] Abdul Naeem, Xiaowen Chen, Zhonghai Lu, and Axel Jantsch. Scalability of relaxed consistency models in NoC based multicore architectures. *ACM SIGARCH Computer Architecture News*, 37(5):8–15, December 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Novakovic:2014:SN

[NDB+14] Stanko Novakovic, Alexandros Daglis, Edouard Bugnion, Babak Falsafi, and Boris Grot. Scale-out NUMA. *ACM SIGARCH Computer Architecture News*, 42(1): 3–18, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Neelakantam:2010:RSE

[NDZ10] Naveen Neelakantam, David R. Ditzel, and Craig Zilles. A real system evaluation of hardware atomicity for software speculation. *ACM SIGARCH Computer Architecture News*, 38(1):29–38, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nair:2012:FOM

[NEEJ12] Arun Arvind Nair, Stijn Eyerman, Lieven Eeckhout, and Lizy Kurian John. A first-order mechanistic model for architectural vulnerability factor. *ACM SIGARCH Computer Architecture News*, 40 (3):273–284, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Newman:1992:MMSb

[New92a] Gary Newman. Memory management support for tiled array organization. *ACM SIGARCH Computer Architecture News*, 20(4):22–30, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Newman:1992:MMSa

[New92b] Gary Newman. Memory management support for tiled array organization (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):431, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ng:1994:CDA

[Ng94] S. W. Ng. Crosshatch disk array for improved reliability and performance. *ACM SIGARCH Computer Architecture News*, 22(2):255–264, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nagarajan:2009:EEC

[NG09] Vijay Nagarajan and Rajiv Gupta. ECMon: exposing cache events for monitoring. *ACM SIGARCH Computer Architecture News*, 37(3):349–360, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nowatzki:2017:SDA

[NGAS17] Tony Nowatzki, Vinay Gangadhar, Newsha Ardalani, and Karthikeyan Sankaralingam. Stream-dataflow acceleration. *ACM SIGARCH Computer Architecture News*, 45(2):416–429, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nakra:1999:VPV

[NGS99] Tarun Nakra, Rajiv Gupta, and Mary Lou Soffa. Value prediction in VLIW machines. *ACM SIGARCH Computer Architecture News*, 27(2):258–269, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nair:1997:EIL

[NH97] Ravi Nair and Martin E. Hopkins. Exploiting instruction level parallelism in processors by caching scheduled groups. *ACM SIGARCH Computer Architecture News*, 25(2):13–25, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Narayanan:2012:WSP

[NH12] Dushyanth Narayanan and Orion Hodson. Whole-system persistence. *ACM SIGARCH Computer Architecture News*, 40(1):401–410, March 2012. ASPLOS '12 conference proceedings.

Nalli:2017:APM

[NHH+17] Sanketh Nalli, Swapnil Haria, Mark D. Hill, Michael M.

Swift, Haris Volos, and Kimberly Keeton. An analysis of persistent memory use with WHISPER. *ACM SIGARCH Computer Architecture News*, 45(1):135–148, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nayfeh:1996:EDA

[NHO96] Basem A. Nayfeh, Lance Hammond, and Kunle Olukotun. Evaluation of design alternatives for a multiprocessor microprocessor. *ACM SIGARCH Computer Architecture News*, 24(2):67–77, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nestle:1985:SNS

[NI85] Elliot Nestle and Armond Inselberg. The SYNAPSE N+1 System: architectural characteristics and performance data of a tightly-coupled multiprocessor system. *ACM SIGARCH Computer Architecture News*, 13(3):233–239, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ni:1998:RTM

[Ni98] Lionel Ni. Retrospective: The turn model for adaptive routing. In ACM [ACM98a], pages 85–86. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Nikhil:1989:CDS

[Nik89] R. S. Nikhil. Can dataflow subsume von Neumann computing? *ACM SIGARCH Computer Architecture News*, 17(3):262–272, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nikolov:2009:QTM

[Nik09] Angel V. Nikolov. Queuing theoretic model for a multiprocessor with private caches and shared memory. *ACM SIGARCH Computer Architecture News*, 37(4):35–44, September 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nishimura:1991:ASM

[Nis91] Naomi Nishimura. Asynchronous shared memory parallel computation (preliminary version). *ACM SIGARCH Computer Architecture News*, 19(1):97–105, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nitezki:1989:EDP

[Nit89] P. Nitezki. Exploiting data parallelism in signal processing on a dataflow machine. *ACM SIGARCH Computer Architecture News*, 17(3):54–61, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nakata:1986:FLS

[NK86] T. Nakata and N. Koike. A functional level simulation engine of MAN-YO: a special purpose parallel machine for logic design automation. *ACM SIGARCH Computer Architecture News*, 14(2):202–208, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Niemier:2001:EEW

[NK01] Michael Thaddeus Niemier and Peter M. Kogge. Exploring and exploiting wire-level pipelining in emerging technologies. *ACM SIGARCH Computer Architecture News*, 29(2):166–177, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nakazaki:1985:DHS

[NKH+85] Ryosei Nakazaki, Akihiko Konagaya, Shin'ichi Habata, Hideo Shimazu, Mamoru Umemutra, Masahiro Yamamoto, Minoru Yokota, and Takashi Chikayama. Design of a high-speed Prolog machine (HPM). *ACM SIGARCH Computer Architecture News*, 13(3):191–197, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nair:2013:AAF

[NKQ13] Prashant J. Nair, Dae-Hyun Kim, and Moinuddin K. Qureshi. ArchShield: architectural framework for assisting DRAM scaling by tolerating high error rates. *ACM SIGARCH Computer Architecture News*, 41(3):72–83, June 2013. ICSA '13 conference proceedings.

Naz:2006:MCS

[NKRL06] Afrin Naz, Krishna Kavi, Mehran Rezaei, and Wentong Li. Making a case for split data caches for embedded applications. *ACM SIGARCH Computer Architecture News*, 34(1):19–26, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nojiri:1986:MPO

[NKS86] T. Nojiri, S. Kawasaki, and K. Sakoda. Microprogrammable processor for object-oriented architecture. *ACM SIGARCH Computer Architecture News*, 14(2):74–81, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nguyen:2014:DGD

[NLP14] Donald Nguyen, Andrew Lenharth, and Keshav Pingali. Deterministic Galois: on-demand, portable and parameterless. *ACM SIGARCH*

Computer Architecture News, 42(1):499–512, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ng:1988:TOB

[NLS88] S. Ng, D. Lang, and R. Selinger. Trade-offs between devices and paths in achieving disk interleaving. *ACM SIGARCH Computer Architecture News*, 16(2):196–201, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nesbit:2007:VPC

[NLS07] Kyle J. Nesbit, James Laudon, and James E. Smith. Virtual private caches. *ACM SIGARCH Computer Architecture News*, 35(2):57–68, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Navarro:1986:CSI

[NLV86] J. J. Navarro, J. M. Llaberia, and M. Valero. Computing size-independent matrix problems on systolic array processors. *ACM SIGARCH Computer Architecture News*, 14(2):271–278, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Najjar:1992:ALL

[NMB92] Walid A. Najjar, W. Marcus Miller, and A. P. Wim Böhm. An analysis of loop latency in dataflow execution. *ACM SIGARCH Computer Architecture News*, 20(2):352–360, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nanda:2000:MPR

[NMS+00] Ashwini Nanda, Kwok-Ken Mak, Krishnan Sugarvanam, Ramendra K. Sahoo, Vijayaraghavan Soundararajan, and T. Basil Smith. MemorIES3: a programmable, real-time hardware emulation tool for multiprocessor server design. *ACM SIGARCH Computer Architecture News*, 28 (5):37–48, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nakaya:2012:NVR

[NMS+12] Shogo Nakaya, Makoto Miyamura, Noboru Sakimura, Yuichi Nakamura, and Tadahiko Sugibayashi. A non-volatile reconfigurable offloader for wireless sensor nodes. *ACM SIGARCH Computer Architecture News*, 40(5):87–92, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Nomura:2014:PAM

[NMS+14] Shimpei Nomura, Takuji Mitsuishi, Jun Suzuki, Yuki Hayashi, Masaki Kan, and Hideharu Amano. Performance analysis of the Multi-GPU system with ExpEther. *ACM SIGARCH Computer Architecture News*, 42(4):9–14, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nuno-Maganda:2010:TCH

[NMTH10] Marco Nuño-Maganda and Cesar Torres-Huitzil. A temporal coding hardware implementation for spiking neural networks. *ACM SIGARCH Computer Architecture News*, 38(4):2–7, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nagarakatte:2012:WHS

[NMZ12] Santosh Nagarakatte, Milo M. K. Martin, and Steve Zdancewic. Watchdog: hardware for safe and secure manual memory management and full memory safety. *ACM SIGARCH Computer Architecture News*, 40(3): 189–200, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Nakahara:2016:FCS

[NNIS16] Hiroki Nakahara, Hiroyuki Nakanishi, Kazumasa Iwai, and Tsutomu Sasao. An FFT circuit for a spectrometer of a radio telescope using the nested RNS including the constant division. *ACM SIGARCH Computer Architecture News*, 44(4):44–49, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nakajima:1991:OVS

[NNN+91] Masaitsu Nakajima, Hiraku Nakano, Yasuhiro Nakakura, Tadahiro Yoshida, Yoshiyuki Goi, Yuji Nakai, Reiji Segawa, Takeshi Kishida, and Hiroshi Kadota. OHMEGA: a VLSI superscalar processor architecture for numerical applications. *ACM SIGARCH Computer Architecture News*, 19(3):160–168, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nagashima:1990:IFA

[NNS+90] Umpei Nagashima, Fumio Nishimoto, Takashi Shibata, Hiroshi Itoh, and Minoru Gotoh. An improvement of I/O function for auxiliary storage: parallel I/O for a large scale supercomputing. *ACM SIGARCH Computer Architecture News*, 18(3b):48–59, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nakahara:2012:WFF

[NNS12] Hiroki Nakahara, Hiroyuki Nakanishi, and Tsutomu Sasao. On a wideband Fast Fourier Transform for a radio telescope. *ACM SIGARCH Computer Architecture News*, 40(5):46–51, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Nayfeh:1994:EDS

[NO94] B. A. Nayfeh and K. Olukotun. Exploring the design space for a shared-cache multiprocessor. *ACM SIGARCH Computer Architecture News*, 22(2):166–175, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nishimura:1983:LPP

[NOK+83] Hitoshi Nishimura, Hiroshi Ohno, Toru Kawata, Isao Shirakawa, and Koichi Omura. Links-1 — a parallel pipelined multimicrocomputer system for image creation. *ACM SIGARCH Computer Architecture News*, 11(3):387–394, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nanba:1985:VAV

[NOK+85] S. Nanba, N. Ohno, H. Kubo, H. Morisue, T. Ohshima, and H. Yamagishi. VM/4: ACOS-4 virtual machine architecture. *ACM SIGARCH Computer Architecture News*, 13(3):171–178, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nowak:1987:SGP

[Now87] Lothar Nowak. SAMP:a general purpose processor based on a self-timed VLIW structure. *ACM SIGARCH Computer Architecture News*, 15 (4):32–39, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Noor:1990:SLS

[NP90] Ahmed K. Noor and Jeanne M. Peters. Strategies for large-scale structural problems on high-performance computers. *ACM SIGARCH Computer Architecture News*, 18(3b): 267–280, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nowatzyk:1995:CRD

[NP95] Andreas G. Nowatzyk and Paul R. Prucnal. Are crossbars really dead?: the case for optical multiprocessor interconnect systems. *ACM SIGARCH Computer Architecture News*, 23(2):106–115, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nguyen:2011:SCS

[NP11] Donald Nguyen and Keshav Pingali. Synthesizing concurrent schedulers for irregular algorithms. *ACM SIGARCH Computer Architecture News*, 39(1):333–344, March 2011.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nguyen:2017:WSP

[NP17] Donald Nguyen and Keshav Pingali. What scalable programs need from transactional memory. *ACM SIGARCH Computer Architecture News*, 45(1):105–118, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nikhil:1992:MMP

[NPA92] R. S. Nikhil, G. M. Papadopoulos, and Arvind. T: a multithreaded massively parallel architecture. *ACM SIGARCH Computer Architecture News*, 20(2):156–167, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Narayanasamy:2005:BCR

[NPC05] Satish Narayanasamy, Gilles Pokam, and Brad Calder. BugNet: Continuously recording program execution for deterministic replay debugging. *ACM SIGARCH Computer Architecture News*, 33(2):284–295, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Narayanasamy:2006:RSM

[NPC06] Satish Narayanasamy, Cristiano Pereira, and Brad Calder. Recording shared memory dependencies using strata. *ACM SIGARCH Computer Architecture News*, 34 (5):229–240, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nightingale:2008:PSC

[NPCF08] Edmund B. Nightingale, Daniel Peek, Peter M. Chen, and Jason Flinn. Parallelizing security checks on commodity hardware. *ACM SIGARCH Computer Architecture News*, 36(1):308–318, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Naz:2005:IDC

[NRKS05] Afrin Naz, Mehran Rezaei, Krishna Kavi, and Philip Sweany. Improving data cache performance with integrated use of split caches, victim cache and stream buffers. *ACM SIGARCH Computer Architecture News*, 33(3):41–48, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Neelakantam:2007:HAR

[NRS+07] Naveen Neelakantam, Ravi Rajwar, Suresh Srinivas, Uma Srinivasan, and Craig Zilles. Hardware atomicity for reliable software speculation. *ACM SIGARCH Computer Architecture News*, 35(2):174–185, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nisnevich:1974:DPC

[NS74] L. Nisnevich and E. Strasbourger. Decentralized priority control in data communication. *ACM SIGARCH Computer Architecture News*, 3(4): 1–6, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nassimi:1980:SRB

[NS80] David Nassimi and Sartaj Sahni. A self routing Benes network. *ACM SIGARCH Computer Architecture News*, 8(3):190–195, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nicoud:1986:RHP

[NS86] J. D. Nicoud and K. Skala. REYSM, a high performance, low power multi-processor bus. *ACM SIGARCH Computer Architecture News*, 14 (2):169–174, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ngai:1991:FAR

[NS91] John Y. Ngai and Charles L. Seitz. A framework for adaptive routing in multicomputer networks. *ACM SIGARCH Computer Architecture News*, 19(1):6–14, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nowatzki:2016:ABS

[NS16] Tony Nowatzki and Karthikeyan Sankaralingam. Analyzing behavior specialized acceleration. *ACM SIGARCH Computer Architecture News*, 44 (2):697–711, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nazari:2017:EEB

[NSA+17] Alireza Nazari, Nader Sehatbakhsh, Monjur Alam, Alenka Zajic, and Milos Prvulovic. EDDIE: EM-based detection of deviations in program execution. *ACM SIGARCH Computer Architecture News*, 45 (2):333–346, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nomura:2011:SDP

[NSH+11] Shuou Nomura, Matthew D. Sinclair, Chen-Han Ho, Venkatraman Govindaraju, Marc de Kruijf, and Karthikeyan Sankaralingam. Sampling + DMR: practical and low-overhead permanent fault detection. *ACM SIGARCH Computer Architecture News*, 39(3):201–212, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Natarajan:1994:MBC

[NSI94] C. Natarajan, S. Sharma, and R. K. Iyer. Measurement-based characterization of global memory and network contention, operating system and parallelization overheads. *ACM SIGARCH Computer Architecture News*, 22(2):71–80, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nagatsuka:2011:CER

[NSMK11] Tomoyuki Nagatsuka, Yoshito Sakaguchi, Takayuki Matsumura, and Kenji Kise. CoreSymphony: an efficient reconfigurable multi-core architecture. *ACM SIGARCH Computer Architecture News*, 39(4):32–37, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nair:2016:XEE

[NSQ16] Prashant J. Nair, Vilas Sridharan, and Moinuddin K. Qureshi. XED: exposing on-die error detection information for strong memory reliability. *ACM SIGARCH Computer Architecture News*, 44 (3):341–353, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Nagle:1994:OAC

[NUMS94] D. Nagle, R. Uhlig, T. Mudge, and S. Sechrest. Optimal allocation of on-chip memory for multiple-API operating systems. *ACM SIGARCH Computer Architecture News*, 22(2):358–369, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nagle:1993:DTS

[NUS+93] David Nagle, Richard Uhlig, Tim Stanley, Stuart Sechrest, Trevor Mudge, and Richard Brown. Design tradeoffs for software-managed TLBs. *ACM SIGARCH Computer Architecture News*, 21(2):27–38, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nutt:1977:MIP

[Nut77] Gary J. Nutt. Microprocessor implementation of a parallel processor. *ACM SIGARCH Computer Architecture News*, 5(7):147–152, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nguyen:2015:FCR

[NWB+15] Khanh Nguyen, Kai Wang, Yingyi Bu, Lu Fang, Jianfei Hu, and Guoqing Xu. FACADE: a compiler and runtime for (almost) object-bounded big data applications. *ACM SIGARCH Computer Architecture News*, 43 (1):675–690, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Noakes:1993:JMM

[NWD93] Michael D. Noakes, Deborah A. Wallach, and William J.

Dally. The J-machine multicomputer: an architectural evaluation. *ACM SIGARCH Computer Architecture News*, 21(2):224–235, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Nunez-Yanez:2014:EER

[NY14] Jose Nunez-Yanez. Energy efficient reconfigurable computing with adaptive voltage and logic scaling. *ACM SIGARCH Computer Architecture News*, 42(4):87–92, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ng:2012:STT

[NYNT12] Nicholas Ng, Nobuko Yoshida, Xin Yu Niu, and Kuen Hung Tsoi. Session types: towards safe and fast reconfigurable programming. *ACM SIGARCH Computer Architecture News*, 40(5):22–27, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Nazhandali:2005:EOS

[NZO+05] Leyla Nazhandali, Bo Zhai, Javin Olson, Anna Reeves, Michael Minuth, Ryan Helfand, Sanjay Pant, Todd Austin, and David Blaauw. Energy optimization of subthreshold-voltage sensor network processors. *ACM SIGARCH Computer Architecture News*, 33(2):197–207, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:1984:MDS

[nZY84] Chang nian Zhang and David Y. Y. Yun. Multi-dimensional systolic networks, for Discrete Fourier Transform. *ACM SIGARCH Computer Architecture News*, 12(3):215–222, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Owicki:1989:EPS

[OA89] S. Owicki and A. Agarwal. Evaluating the performance of software cache coherence. *ACM SIGARCH Computer Architecture News*, 17(2):230–242, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ottoni:2008:COG

[OA08] Guilherme Ottoni and David I. August. Communication optimizations for global multi-threaded instruction scheduling. *ACM SIGARCH Computer Architecture News*, 36 (1):222–232, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Olszewski:2009:KED

[OAA09] Marek Olszewski, Jason Ansel, and Saman Amarasinghe.

Kendo: efficient deterministic multithreading in software. *ACM SIGARCH Computer Architecture News*, 37 (1):97–108, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Orr:2014:FGT

[OBRW14] Marc S. Orr, Bradford M. Beckmann, Steven K. Reinhardt, and David A. Wood. Fine-grain task aggregation and coordination on GPUs. *ACM SIGARCH Computer Architecture News*, 42(3): 181–192, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Otis:1978:ERD

[OC78] Allen J. Otis and George P. Copeland. Editing requirements for data base applications and their implementation on the INDY backend kernel. *ACM SIGARCH Computer Architecture News*, 7(2): 18–29, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oudjida:2012:NHR

[OCBL12] A. K. Oudjida, N. Chaillet, M. L. Berrandjia, and A. Liacha. A new high radix-2 r ($r \geq 8$) multibit recoding algorithm for large operand size ($N \geq 32$) multipliers. *ACM SIGARCH Computer Architecture News*, 40(4):32–43, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oskin:2003:BQW

[OCCK03] Mark Oskin, Frederic T. Chong, Isaac L. Chuang, and John Kubiatowicz. Building quantum wires: the long and the short of it. *ACM SIGARCH Computer Architecture News*, 31(2):374–387, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oskin:2000:HCS

[OCF00] Mark Oskin, Frederic T. Chong, and Matthew Farrens. HLS: combining statistical and symbolic simulation to guide microprocessor designs. *ACM SIGARCH Computer Architecture News*, 28 (2):71–82, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oyang:1990:CEA

[OCL90] Yen-Jen Oyang, Bor-Ting Chang, and Shu-May Lin. A cost-effective approach to implement a long instruction word microprocessor. *ACM SIGARCH Computer Architecture News*, 18(1):59, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oskin:1998:APC

[OCS98] Mark Oskin, Frederic T. Chong, and Timothy Sherwood. Active pages: a computation model for intelligent memory. *ACM SIGARCH Computer Architecture News*, 26(3):192–203, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Orr:2015:SUR

[OCY+15] Marc S. Orr, Shuai Che, Ayse Yilmazer, Bradford M. Beckmann, Mark D. Hill, and David A. Wood. Synchronization using remote-scope promotion. *ACM SIGARCH Computer Architecture News*, 43(1):73–86, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Olson:2016:PDW

[OH16] Lena E. Olson and Mark D. Hill. Probabilistic directed writebacks for exclusive caches. *ACM SIGARCH Computer Architecture News*, 44(1):9–18, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Olson:2017:CGM

[OHW17] Lena E. Olson, Mark D. Hill, and David A. Wood. Crossing guard: Mediating host-accelerator coherence interactions. *ACM SIGARCH Computer Architecture News*, 45 (1):163–176, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ogawa:2013:RJA

[OIA+13] Yuki Ogawa, Masahiro Iida, Motoki Amagasaki, Morihiro Kuga, and Toshinori Sueyoshi. A reconfigurable Java accelerator with software compatibility for embedded systems. *ACM SIGARCH Computer Architecture News*, 41(5):71–76, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oh:2013:PAL

[OKJ+13] Taewook Oh, Hanjun Kim, Nick P. Johnson, Jae W. Lee, and David I. August. Practical automatic loop specialization. *ACM SIGARCH Computer Architecture News*, 41 (1):419–430, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ogata:2002:BFO

[OKN02] Kazunori Ogata, Hideaki Komatsu, and Toshio Nakatani. Bytecode fetch optimization for a Java interpreter. *ACM SIGARCH Computer Architecture News*, 30(5):58–67, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oh:2016:AIC

[OKY+16] Yunho Oh, Keunsoo Kim, Myung Kuk Yoon, Jong Hyun Park, Yongjun Park, Won Woo Ro, and Murali Annavaram. APRES: improving cache efficiency by exploiting load characteristics on GPUs. *ACM SIGARCH Computer Architecture News*, 44(3):191–203, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oplinger:2002:ESR

[OL02] Jeffrey Oplinger and Monica S. Lam. Enhancing software reliability with speculative threads. *ACM SIGARCH Computer Architecture News*, 30(5):184–196, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ouyang:2014:SSD

[OLJ+14] Jian Ouyang, Shiding Lin, Song Jiang, Zhenyu Hou, Yong Wang, and Yuanzheng Wang. SDF: software-defined flash for Web-scale Internet storage systems. *ACM SIGARCH Computer Architecture News*, 42(1):471–484, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ohnemus:1994:BIL

[OM94] Kenneth R. Ohnemus and Diana F. Mallin. Benefits of implementing on-line methods and procedures. *ACM SIGARCH Computer Architecture News*, 22(5):49–55, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Olukotun:1991:ICH

[OMB91] O. A. Olukotun, T. N. Mudge, and R. B. Brown. Implementing a cache for a high-performance GaAs microprocessor. *ACM SIGARCH Computer Architecture News*, 19(3):138–147, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Olukotun:1992:POP

[OMB92] Kunle Olukotun, Trevor Mudge, and Richard Brown. Performance optimization of pipelined primary cache. *ACM SIGARCH Computer Architecture News*, 20(2):181–190, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Opper:1983:RAR

[OML83] Eli Opper, Miroslaw Malek, and G. Jack Lipovski. Resource allocation in rectangular CC-banyans. *ACM SIGARCH Computer Architecture News*, 11(3):178–184, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

OKrafka:1990:EET

[ON90] Brian W. O'Krafka and A. Richard Newton. An empirical evaluation of two memory-efficient directory methods. *ACM SIGARCH Computer Architecture News*, 18(3a):138–147, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Odaira:2012:COA

[ON12] Rei Odaira and Toshio Nakatani. Continuous object access profiling and optimizations to overcome the memory wall and bloat. *ACM SIGARCH Computer Architecture News*, 40(1):147–158, March 2012. ASPLOS '12 conference proceedings.

Oh:2011:TSM

[OPZ11] Jungju Oh, Milos Prvulovic, and Alenka Zajic. TLSync: support for multiple fast barriers using on-chip transmission lines. *ACM SIGARCH Computer Architecture News*, 39 (3):105–116, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oehlrich:1991:PEC

[OQ91] C. W. Oehlrich and A. Quick. Performance evaluation of a communication system for transputer-networks based on monitored event traces. *ACM SIGARCH Computer Architecture News*, 19(3):202–211, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oliver:2004:SMC

[ORS+04] John Oliver, Ravishankar Rao, Paul Sultana, Jedidiah Crandall, Erik Czernikowski, Leslie W. Jones IV, Diana Franklin, Venkatesh Akella, and Frederic T. Chong. Synchroscalar: a multiple clock domain, power-aware, tile-based embedded processor. *ACM SIGARCH Computer Architecture News*, 32(2): 150, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oberoi:2003:PFE

[OS03] Paramjit S. Oberoi and Gurindar S. Sohi. Parallelism in the front-end. *ACM SIGARCH Computer Architecture News*, 31(2):230–240, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Okina:2015:PPP

[OSF+15] Koji Okina, Rie Soejima, Kota Fukumoto, Yuichiro Shibata, and Kiyoshi Oguri. Power performance profiling of 3-D stencil computation on an FPGA accelerator for efficient pipeline optimization. *ACM SIGARCH Computer Architecture News*, 43(4):9–14, September 2015. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Omote:2015:IAE

[OSK15] Yushi Omote, Takahiro Shinagawa, and Kazuhiko Kato. Improving agility and elasticity in bare-metal clouds. *ACM SIGARCH Computer Architecture News*, 43(1):145–159, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

O:2014:RBD

[OSKA14] Seongil O, Young Hoon Son, Nam Sung Kim, and Jung Ho Ahn. Row-buffer decoupling: a case for low-latency DRAM microarchitecture. *ACM SIGARCH Computer Architecture News*, 42 (3):337–348, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oslon:1989:DAP

[Osl89] T. M. Oslon. Disk array performance in a random IO environment. *ACM SIGARCH Computer Architecture News*, 17(5):71–77, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Omohundro:1973:FFC

[OT73] Wayne E. Omohundro and James H. Tracey. Flowware—a flow charting procedure to describe digital networks. *ACM SIGARCH Computer Architecture News*, 2(4):91–97, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Onaga:1986:DRA

[OT86] K. Onaga and T. Takechi. On design of rotary array communication and wavefront-driven algorithms for solving large-scale band-limited matrix equations. *ACM SIGARCH Computer Architecture News*, 14(2):308–315, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ohkawa:2013:RHO

[OUY+13] Takeshi Ohkawa, Daichi Uetake, Takashi Yokota, Kanemitsu Ootsu, and Takanobu Baba. Reconfigurable and hardwired ORB engine on FPGA by Java-to-HDL synthesizer for realtime application. *ACM SIGARCH Computer Architecture News*, 41(5):77–82, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Oyang:1990:EEA

[OWCL90] Yen-Jen Oyang, Chun-Hung Wen, Yu-Fen Chen, and Shu-May Lin. The effect of employing advanced branching mechanisms in superscalar processors. *ACM SIGARCH Computer Architecture News*, 18(4):35–52, December 1990.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Oyang:1989:MCA

[Oya89] Y.-J. Oyang. A multiprocessor configuration in accordance with the aspects of physical and systems design. *ACM SIGARCH Computer Architecture News*, 17 (4):69–73, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ozdal:2016:EEA

[OYK+16] Muhammet Mustafa Ozdal, Serif Yesil, Taemin Kim, Andrey Ayupov, John Greth, Steven Burns, and Ozcan Ozturk. Energy efficient architecture for graph analytics accelerators. *ACM SIGARCH Computer Architecture News*, 44(3):166–177, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Olszewski:2012:AAS

[OZK+12] Marek Olszewski, Qin Zhao, David Koh, Jason Ansel, and Saman Amarasinghe. Aikido: accelerating shared data dynamic analyses. *ACM SIGARCH Computer Architecture News*, 40(1):173–184, March 2012. ASPLOS '12 conference proceedings.

Ozturk:2015:ASC

[Ozt15] Ozcan Ozturk. Architectural support for cyber-physical systems. *ACM SIGARCH Computer Architecture News*, 43 (1):1, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Parhami:1973:DFT

[PA73] Behrooz Parhami and Algirdas Avizienis. Design of fault-tolerant associative processors. *ACM SIGARCH Computer Architecture News*, 2(4):141–145, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pucci:1988:OCE

[PA88] Marc F. Pucci and J. L. Alberi. Optimized communication in an extended remote procedure call model. *ACM SIGARCH Computer Architecture News*, 16(4):37–46, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pan:2005:CPE

[PACL05] Heidi Pan, Krste Asanović, Robert Cohn, and Chi-Keung Luk. Controlling program execution through binary instrumentation. *ACM SIGARCH Computer Architecture News*, 33(5):45–50, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pangracious:2016:NTD

[PAD16] Vinod Pangracious and Mulhim Al-Doori. Novel three-dimensional embedded FPGA technology and achitecture. *ACM SIGARCH Computer Architecture News*, 44(4):50–55, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Palmer:1980:IND

[Pal80] John Palmer. The Intel 8087 numeric data processor. *ACM SIGARCH Computer Architecture News*, 8(3):174–181, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2016:ATC

[PAM+16] Jongse Park, Emmanuel Amaro, Divya Mahajan, Bradley Thwaites, and Hadi Esmaeilzadeh. AxGames: Towards crowdsourcing quality target determination in approximate computing. *ACM SIGARCH Computer Architecture News*, 44(2):623–636, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Parnas:1975:ECA

[Par75] D. L. Parnas. Evaluation criteria for abstract machines with unknown applications. *ACM SIGARCH Computer Architecture News*, 4(3):2–9, September 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parhami:1988:BRM

[Par88a] Behrooz Parhami. Book review: *Memory Storage Patterns in Parallel Processing* by Mary A. Mace (Kluwer Academic Publishers, Boston, 1987, 139 pp.). *ACM SIGARCH Computer Architecture News*, 16(5):76, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parhami:1988:DFV

[Par88b] Behrooz Parhami. From defects to failures: a view of dependable computing. *ACM SIGARCH Computer Architecture News*, 16(4):157–168, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parhami:1990:BRA

[Par90] Behrooz Parhami. Book review: *Advanced Research in VLSI*, edited by Charles L. Seitz (The MIT Press, Cambridge, MA, 1989, 373 pp.). *ACM SIGARCH Computer Architecture News*, 18(1):122–123, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parhami:1995:SMD

[Par95] Behrooz Parhami. SIMD machines: do they have a significant future? *ACM SIGARCH Computer Architecture News*, 23(4):19–22, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parker:2002:CUL

[Par02] Mike Parker. A case for user-level interrupts. *ACM SIGARCH Computer Architecture News*, 30(3):17–18, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Phothilimthana:2013:PPH

[PARKA13] Phitchaya Mangpo Phothilimthana, Jason Ansel, Jonathan Ragan-Kelley, and Saman Amarasinghe. Portable performance on heterogeneous architectures. *ACM SIGARCH Computer Architecture News*, 41 (1):431–444, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Patterson:1982:PEI

[Pat82] David A. Patterson. A performance evaluation of the Intel 80286. *ACM SIGARCH Computer Architecture News*, 10(5):16–18, September 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1984:RW

[Pat84] David A. Patterson. RISC watch. *ACM SIGARCH Computer Architecture News*, 12(1):11–19, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1987:PRS

[Pat87] Dave Patterson. A progress report on SPUR: February 1, 1987. *ACM SIGARCH Computer Architecture News*, 15(1):15–21, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1988:RP

[Pat88] David A. Patterson. RISCY patents. *ACM SIGARCH Computer Architecture News*, 16(4):169–191, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1991:TGS

[Pat91] David A. Patterson. Towards guidelines for SIGARCH sponsored conferences. *ACM SIGARCH Computer Architecture News*, 19(5):7, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patel:1998:RLO

[Pat98a] Janak H. Patel. Retrospective: a low-overhead coherence solution for multiprocessors with private cache memories. In ACM [ACM98a], pages 39–41. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358;`

http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Patel:1998:RIT

[Pat98b] Janak H. Patel. Retrospective: Improving the throughput of a pipeline by insertion of delays. In ACM [ACM98a], page 5. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Patt:2006:CAR

[Pat06] Yale Patt. Computer architecture research and future microprocessors: Where do we go from here? *ACM SIGARCH Computer Architecture News*, 34(2):2, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Paulos:2013:REA

[Pau13] Eric Paulos. The rise of the expert amateur: DIY culture and the evolution of computer science. *ACM SIGARCH Computer Architecture News*, 41(1):153–154, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pothukuchi:2016:UMI

[PAVT16] Raghavendra Pradyumna Pothukuchi, Amin Ansari, Petros Voulgaris, and Josep Torrellas. Using multiple input, multiple output formal control to maximize resource efficiency in architectures. *ACM SIGARCH Computer Architecture News*, 44(3):658–670, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Payne:1978:CCD

[Pay78] A. J. Payne. A computer console design to help the operator. *ACM SIGARCH Computer Architecture News*, 7(1): 15–22, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Poremba:2017:TBA

[PAY+17] Matthew Poremba, Itir Akgun, Jieming Yin, Onur Kayiran, Yuan Xie, and Gabriel H. Loh. There and back again: Optimizing the interconnect in networks of memory cubes. *ACM SIGARCH Computer Architecture News*, 45(2): 678–690, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Payne:1980:VFP

[PB80] Mary Payne and Dileep Bhandarkar. VAX floating point:

a solid foundation for numerical computation. *ACM SIGARCH Computer Architecture News*, 8(4):22–33, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Premkumar:1982:RAR

[PB82] U. V. Premkumar and J. C. Browne. Resource allocation in rectangular SW banyans. *ACM SIGARCH Computer Architecture News*, 10(3):326–333, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2013:RCH

[PBC+13] Heekwon Park, Seungjae Baek, Jongmoo Choi, Donghee Lee, and Sam H. Noh. Regularities considered harmful: forcing randomness to memory accesses to reduce row buffer conflicts for multi-core, multi-bank systems. *ACM SIGARCH Computer Architecture News*, 41(1):181–192, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Powell:2009:ACS

[PBGM09] Michael D. Powell, Arijit Biswas, Shantanu Gupta, and Shubhendu S. Mukherjee. Architectural core salvaging in a multi-core processor for hard-error tolerance. *ACM SIGARCH Computer Architecture News*, 37(3):93–104, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:1990:ISF

[PBL90] Arvin Park, Jeffrey C. Becker, and Richard J. Lipton. IOStone: a synthetic file system benchmark. *ACM SIGARCH Computer Architecture News*, 18(2):45–52, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Porter:2011:RLT

[PBWH+11] Donald E. Porter, Silas Boyd-Wickizer, Jon Howell, Reuben Olinsky, and Galen C. Hunt. Rethinking the library OS from the top down. *ACM SIGARCH Computer Architecture News*, 39(1):291–304, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:1983:FDB

[PC83] Young Gil Park and Jung Wan Cho. Fault diagnosis of bit-slice processor. *ACM SIGARCH Computer Architecture News*, 11(3):166–172, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Papadopoulos:1990:MET

[PC90] Gregory M. Papadopoulos and David E. Culler. Monsoon: an explicit token-store architecture. *ACM SIGARCH Computer Architecture News*, 18(3a):82–91, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Papadopoulos:1998:RME

[PC98a] George M. Papadopoulos and David E. Culler. Retrospective: Monsoon: an explicit token-store architecture. In ACM [ACM98a], pages 74–76. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Papadopoulos:1998:MET

[PC98b] Gregory M. Papadopoulos and David E. Culler. Monsoon: an explicit token-store architecture. In ACM [ACM98a], pages 398–407. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Pericas:2008:TLL

[PCC+08] Miquel Pericàs, Adrian Cristal, Francisco J. Cazorla, Ruben González, Alex Veidenbaum, Daniel A. Jiménez, and Mateo Valero. A two-level load/store queue based on execution locality. *ACM SIGARCH Computer Architecture News*, 36 (3):25–36, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Putnam:2014:RFA

[PCC+14] Andrew Putnam, Adrian M. Caulfield, Eric S. Chung, Derek Chiou, Kypros Constantinides, John Demme, Hadi Esmaeilzadeh, Jeremy Fowers, Gopi Prashanth, Gopal Jan, Gray Michael, Haselman Scott Hauck, Stephen Heil, Amir Hormati, Joo-Young Kim, Sitaram Lanka, James Larus, Eric Peterson, Simon Pope, Aaron Smith, Jason Thong, Phillip Yi, and Xiao Doug Burger. A reconfigurable fabric for accelerating large-scale datacenter services. *ACM SIGARCH Computer Architecture News*, 42 (3):13–24, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pistol:2009:AIN

[PCDL09] Constantin Pistol, Wutichai Chongchitmate, Christopher Dwyer, and Alvin R. Lebeck. Architectural implications of nanoscale integrated sensing and computing. *ACM SIGARCH Computer Architecture News*, 37(1):13–

24, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pollack:1982:SAM

[PCH+82] Fred J. Pollack, George W. Cox, Dan W. Hammerstrom, Kevin C. Kahn, Konrad K. Lai, and Justin R. Rattner. Supporting Ada memory management in the iAPX-432. *ACM SIGARCH Computer Architecture News*, 10(2):117–131, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Paek:2010:BAU

[PCL10] Jong Kyung Paek, Kiyoung Choi, and Jongeun Lee. Binary acceleration using coarse-grained reconfigurable architecture. *ACM SIGARCH Computer Architecture News*, 38(4):33–39, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pelley:2014:MP

[PCW14] Steven Pelley, Peter M. Chen, and Thomas F. Wenisch. Memory persistency. *ACM SIGARCH Computer Architecture News*, 42(3):265–276, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Patel:1976:ITP

[PD76] Janak H. Patel and Edward S. Davidson. Improving the throughput of a pipeline by insertion of delays. *ACM SIGARCH Computer Architecture News*, 4(4):159–164, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1980:CRI

[PD80] David A. Patterson and David R. Ditzel. The case for the reduced instruction set computer. *ACM SIGARCH Computer Architecture News*, 8(6):25–33, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patel:1998:ITP

[PD98] Janak H. Patel and Edward S. Davidson. Improving the throughput of a pipeline by insertion of delays. In ACM [ACM98a], pages 132–137. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Pang:2015:MLL

[PDL15] Jun Pang, Chris Dwyer, and Alvin R. Lebeck. More is less,

less is more: Molecular-scale photonic NoC power topologies. *ACM SIGARCH Computer Architecture News*, 43 (1):283–296, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pokam:2013:QPI

[PDP+13] Gilles Pokam, Klaus Danne, Cristiano Pereira, Rolf Kassa, Tim Kranich, Shiliang Hu, Justin Gottschlich, Nima Honarmand, Nathan Dautenhahn, Samuel T. King, and Josep Torrellas. QuickRec: prototyping an Intel architecture extension for record and replay of multithreaded programs. *ACM SIGARCH Computer Architecture News*, 41 (3):643–654, June 2013. ICSA '13 conference proceedings.

Putnam:2009:PPC

[PEB+09] Andrew Putnam, Susan Eggers, Dave Bennett, Eric Dellinger, Jeff Mason, Henry Styles, Prasanna Sundararajan, and Ralph Wittig. Performance and power of cache-based reconfigurable computing. *ACM SIGARCH Computer Architecture News*, 37(3):395–405, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2008:MML

[PED+08] Dongkook Park, Soumya Eachempati, Reetuparna Das, Asit K. Mishra, Yuan Xie, N. Vijaykrishnan, and Chita R. Das. MIRA: a multi-layered on-chip interconnect router architecture. *ACM SIGARCH Computer Architecture News*, 36(3):251–261, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Penn:1988:PSI

[Pen88] Clif Penn. Preface to the Special issue on Neural Networks. *ACM SIGARCH Computer Architecture News*, 16 (1):6, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patel:1998:ITC

[PEP98] Sanjay Jeram Patel, Marius Evers, and Yale N. Patt. Improving trace cache effectiveness with branch promotion and trace packing. *ACM SIGARCH Computer Architecture News*, 26(3):262–271, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Peskin:1974:CAD

[Pes74] A. M. Peskin. The computer aided design of processor architectures. *ACM SIGARCH Computer Architecture News*, 3(4):51–55, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2003:IMP

[PFV03] Il Park, Babak Falsafi, and T. N. Vijaykumar. Implicitly-multithreaded processors. *ACM SIGARCH Computer Architecture News*, 31(2):39–51, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Prasad:2016:PMR

[PG16] Aravinda Prasad and K. Gopinath. Prudent memory reclamation in procrastination-based synchronization. *ACM SIGARCH Computer Architecture News*, 44(2):99–112, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pellegrini:2012:VVP

[PGB12] Andrea Pellegrini, Joseph L. Greathouse, and Valeria Bertacco. Viper: virtual pipelines for enhanced reliability. *ACM SIGARCH Computer Architecture News*, 40 (3):344–355, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Patterson:1983:AVI

[PGH+83] David A. Patterson, Phil Garrison, Mark Hill, Dimitris Lioupis, Chris Nyberg, Tim Sippel, and Korbin Van Dyke. Architecture of a VLSI instruction cache for a RISC. *ACM SIGARCH Computer Architecture News*, 11(3):108–116, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pleszkun:1987:WRA

[PGH+87] A. R. Pleszkun, J. R. Goodman, W. C. Hsu, R. T. Joersz, G. Bier, P. Woest, and P. B. Schechter. WISQ: a restartable architecture using queues. *ACM SIGARCH Computer Architecture News*, 15(2):290–299, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Prvulovic:2001:RAB

[PGRT01] Milos Prvulovic, María Jesús Garzarán, Lawrence Rauchwerger, and Josep Torrellas. Removing architectural bottlenecks to the scalability of speculative parallelization. *ACM SIGARCH Computer Architecture News*, 29(2):204–215, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parashar:2004:CEA

[PGS04] Angshuman Parashar, Sudhanva Gurumurthi, and Anand Sivasubramaniam. A complexity-effective approach to ALU bandwidth enhancement for instruction-level temporal redundancy. *ACM SIGARCH Computer Architecture News*, 32(2):376, March 2004. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Petit:2000:LSE

[PGSP00] S. Petit, J. A. Gil, J. Sahuquillo, and A. Pont. LIDE: a simulation environment for shared virtual memory systems. *ACM SIGARCH Computer Architecture News*, 28 (4):11–18, September 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Postiff:1999:LIL

[PGTM99] Matthew A. Postiff, David A. Greene, Gary S. Tyson, and Trevor N. Mudge. The limits of instruction level parallelism in SPEC95 applications. *ACM SIGARCH Computer Architecture News*, 27(1):31–34, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pajuelo:2002:SDV

[PGV02] Alex Pajuelo, Antonio González, and Mateo Valero. Speculative dynamic vectorization. *ACM SIGARCH Computer Architecture News*, 30(2):271–280, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pajuelo:2005:SEH

[PGV05] Alex Pajuelo, Antonio González, and Mateo Valero. Speculative execution for hiding memory latency. *ACM SIGARCH Computer Architecture News*, 33(3):49–56, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Puente:2004:ICR

[PGVB04] V. Puente, J. A. Gregorio, F. Vallejo, and R. Beivide. Immunet: a cheap and robust fault-tolerant packet routing mechanism. *ACM SIGARCH Computer Architecture News*, 32(2):198, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Preiss:1985:DFQ

[PH85] Bruno R. Preiss and V. C. Hamacher. Data flow on a queue machine. *ACM SIGARCH Computer Architecture News*, 13(3):342–351, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Preiss:1988:CBM

[PH88] B. R. Preiss and V. C. Hamacher. A cache-based message passing scheme for a shared-bus multiprocessor. *ACM SIGARCH Computer Architecture News*, 16(2):358–364, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pnevmatikatos:1990:CPI

[PH90] Dionisios N. Pnevmatikatos and Mark D. Hill. Cache performance of the integer

SPEC benchmarks on a RISC. *ACM SIGARCH Computer Architecture News*, 18(2):53–68, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pichai:2014:ASA

[PHB14] Bharath Pichai, Lisa Hsu, and Abhishek Bhattacharjee. Architectural support for address translation on GPUs: designing memory management units for CPU/GPUs with unified address spaces. *ACM SIGARCH Computer Architecture News*, 42(1):743–758, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Prybylski:1988:PTC

[PHH88] S. Prybylski, M. Horowitz, and J. Hennessy. Performance tradeoffs in cache design. *ACM SIGARCH Computer Architecture News*, 16(2):290–298, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Przybylski:1989:CPO

[PHH89] S. Przybylski, M. Horowitz, and J. Hennessy. Characteristics of performance-optimal multi-level cache hierarchies. *ACM SIGARCH Computer Architecture News*, 17(3):114–121, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2016:ESFa

[PHH16a] Caching Hyun Park, Taekyung Heo, and Jaehyuk Huh. Efficient synonym filtering and scalable delayed translation for hybrid virtual. *ACM SIGARCH Computer Architecture News*, 44(3):90–102, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Park:2016:ESFb

[PHH16b] Chang Hyun Park, Taekyung Heo, and Jaehyuk Huh. Efficient synonym filtering and scalable delayed translation for hybrid virtual caching. *ACM SIGARCH Computer Architecture News*, 44(3): 217–229, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Philipson:1984:VBD

[Phi84] Lars Philipson. VLSI based design principles for MIMD multiprocessor computers with distributed memory management. *ACM SIGARCH Computer Architecture News*, 12(3):319–327, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2017:HTC

[PHJH17] Chang Hyun Park, Taekyung Heo, Jungi Jeong, and Jaehyuk Huh. Hybrid TLB coalescing: Improving TLB translation coverage under diverse fragmented memory allocations. *ACM SIGARCH Computer Architecture News*, 45(2):444–456, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Petrica:2013:FDA

[PIAS13] Paula Petrica, Adam M. Izraelevitz, David H. Albonesi, and Christine A. Shoemaker. Flicker: a dynamically adaptive architecture for power limited multicore systems. *ACM SIGARCH Computer Architecture News*, 41 (3):13–23, June 2013. ICSA '13 conference proceedings.

Pier:1983:RDH

[Pie83] Kenneth A. Pier. A retrospective on the Dorado, a high-performance personal computer. *ACM SIGARCH Computer Architecture News*, 11(3):252–269, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pier:1998:RPH

[Pie98] Ken Pier. Retrospective: a processor for a high-performance personal computer. In ACM [ACM98a], pages 17–19. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Patwardhan:2006:DTS

[PJDL06] Jaidev P. Patwardhan, Vijeta Johri, Chris Dwyer, and Alvin R. Lebeck. A defect tolerant self-organizing nanoscale SIMD architecture. *ACM SIGARCH Computer Architecture News*, 34(5):241–251, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Phansalkar:2007:ARA

[PJJ07a] Aashish Phansalkar, Ajay Joshi, and Lizy K. John. Analysis of redundancy and application balance in the SPEC CPU2006 benchmark suite. *ACM SIGARCH Computer Architecture News*, 35(2):412–423, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Phansalkar:2007:SSC

[PJJ07b] Aashish Phansalkar, Ajay Joshi, and Lizy K. John. Subsetting the SPEC CPU2006 benchmark suite. *ACM SIGARCH Computer Architecture News*, 35(1):69–76, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Palacharla:1997:CES

[PJS97] Subbarao Palacharla, Norman P. Jouppi, and J. E. Smith. Complexity-effective superscalar processors. *ACM SIGARCH Computer Architecture News*, 25(2):206–218, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Palacharla:1994:ESB

[PK94] S. Palacharla and R. E. Kessler. Evaluating stream buffers as a secondary cache replacement. *ACM SIGARCH Computer Architecture News*, 22(2):24–33, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Prabhakar:2016:GCH

[PKB+16] Raghu Prabhakar, David Koeplinger, Kevin J. Brown, HyoukJoong Lee, Christopher De Sa, Christos Kozyrakis, and Kunle Olukotun. Generating configurable hardware from parallel patterns. *ACM SIGARCH Computer Architecture News*, 44(2):651–665, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pan:2009:FIF

[PKK+09] Yan Pan, Prabhat Kumar, John Kim, Gokhan Memik, Yu Zhang, and Alok Choudhary. Firefly: illuminating future network-on-chip with nanophotonics. *ACM SIGARCH Computer Architecture News*, 37(3):429–440, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patel:2017:RPR

[PKM17] Minesh Patel, Jeremie S. Kim, and Onur Mutlu. The reach profiler (REAPER): Enabling the mitigation of DRAM retention failures via profiling at aggressive conditions. *ACM SIGARCH Computer Architecture News*, 45(2):255–268, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Poe:2006:BBS

[PL06] James Poe and Tao Li. BASS: a benchmark suite for evaluating architectural security systems. *ACM SIGARCH Computer Architecture News*, 34(4):26–33, September 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2009:CEA

[PLZ09] Soyeon Park, Shan Lu, and Yuanyuan Zhou. CTrigger: exposing atomicity violation bugs from their hiding places. *ACM SIGARCH Computer Architecture News*, 37 (1):25–36, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Park:1992:CRS

[PM92] Arvin Park and Ron Maeder. Codes to reduce switching transients across VLSI I/O pins. *ACM SIGARCH Computer Architecture News*, 20 (4):17–21, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pell:2011:SEF

[PM11] Oliver Pell and Oskar Mencer. Surviving the end of frequency scaling with reconfigurable dataflow computing. *ACM SIGARCH Computer Architecture News*, 39(4):60–65, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Paul:2013:CBN

[PMA+13] Indrani Paul, Srilatha Manne, Manish Arora, W. Lloyd Bircher, and Sudhakar Yalamanchili. Cooperative boosting: needy versus greedy power management. *ACM SIGARCH Computer Architecture News*, 41(3):285–296, June 2013. ICSA '13 conference proceedings.

Paez-Monzon:1996:RPD

[PMPM96] Gerard Páez-Monzón and Charles Páez-Monzón. The RISC processor DMN-6: a unified data-control flow architecture. *ACM SIGARCH Computer Architecture News*, 24(4):3–10, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pelley:2010:PRD

[PMZ+10] Steven Pelley, David Meisner, Pooya Zandevakili, Thomas F. Wenisch, and Jack Underwood. Power routing: dynamic power provisioning in the data center. *ACM SIGARCH Computer Architecture News*, 38(1):231–242, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parker:1977:HST

[PN77] A. C. Parker and A. W. Nagle. Hardware/software tradeoffs in a variable word width, variable queue length buffer memory. *ACM SIGARCH Computer Architecture News*, 5(7):159–164, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Page:1988:FAH

[PN88] Ivor Page and Jeff Niehaus. The Flex architecture, a high speed graphics processor. *ACM SIGARCH Computer Architecture News*, 16(4):117–129, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Philipson:1983:CSM

[PNB83] Lars Philipson, Bo Nilsson, and Bjorn Breidegard. A communication structure for a multiprocessor computer with distributed global memory. *ACM SIGARCH Computer Architecture News*, 11(3):334–340, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ponder:1991:PVA

[Pon91] Carl Ponder. Performance variation across benchmark suites. *ACM SIGARCH Computer Architecture News*, 19 (4):30–36, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Poujoulat:1977:ACB

[Pou77] G. H. Poujoulat. Architecture of the CORAIL building block system. *ACM SIGARCH Computer Architecture News*, 5(7):201–204, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1982:RAH

[PP82] David A. Patterson and Richard S. Piepho. RISC assessment: a high-level language experiment. *ACM SIGARCH Computer Architecture News*, 10(3):3–8, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pehrson:1983:CID

[PP83] Björn Pehrson and Joachim Parrow. Caddie an interactive design environment. *ACM SIGARCH Computer Architecture News*, 11(3):24–31, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Papamarcos:1984:LOC

[PP84] Mark S. Papamarcos and Janak H. Patel. A low-overhead coherence solution for multiprocessors with private cache memories. *ACM SIGARCH Computer Architecture News*, 12(3):348–354, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Percus:1988:SRC

[PP88] Ora E. Percus and J. K. Percus. Some results concerning clock-regulated queues. *ACM SIGARCH Computer Architecture News*, 16(4):138–144, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Prakash:1992:SAS

[PP92] Shiv Prakash and Alice C. Parker. Synthesis of application-specific heterogeneous multiprocessor systems (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):434, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Papamarcos:1998:LOC

[PP98] Mark S. Papamarcos and Janak H. Patel. A low-overhead coherence solution for multiprocessors with private cache memories. In ACM [ACM98a], pages 284–290. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Pitsianis:2003:IVM

[PP03] Nikos P. Pitsianis and Gerald G. Pechanek. Indirect VLIW memory allocation for the ManArray multiprocessor DSP. *ACM SIGARCH Computer Architecture News*, 31(1):69–74, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parashar:2013:TIC

[PPA+13] Angshuman Parashar, Michael Pellauer, Michael Adler, Bushra Ahsan, Neal Crago, Daniel Lustig, Vladimir Pavlov, Antonia Zhai, Mohit Gambhir, Aamer Jaleel, Randy Allmon, Rachid Rayess, Stephen Maresh, and Joel Emer. Triggered instructions: a control paradigm for spatially-programmed architectures. *ACM SIGARCH Computer Architecture News*, 41(3):142–153, June 2013. ICSA '13 conference proceedings.

Park:2015:CCP

[PPM15] Jason Jong Kyu Park, Yongjun Park, and Scott Mahlke. Chimera: Collaborative preemption for multitasking on a shared GPU. *ACM SIGARCH Computer Architecture News*, 43(1):593–606, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Park:2017:DRM

[PPM17] Jason Jong Kyu Park, Yongjun Park, and Scott Mahlke. Dynamic resource management for efficient utilization of multitasking GPUs. *ACM SIGARCH Computer Architecture News*, 45(1):527–540, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Purnaprajna:2009:RTR

[PPR09] Madhura Purnaprajna, Mario Porrmann, and Ulrich Rueckert. Run-time reconfigurability in embedded multiprocessors. *ACM SIGARCH Computer Architecture News*, 37 (2):30–37, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pulido:1996:ETT

[PPZ96] J. A. Gómez Pulido, J. M. Sánchez Pérez, and J. A. Moreno Zamora. An educational tool for testing hierarchical multilevel caches. *ACM SIGARCH*

Computer Architecture News, 24(4):11–15, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Paolieri:2009:HSW

[PQC+09] Marco Paolieri, Eduardo Quiñones, Francisco J. Cazorla, Guillem Bernat, and Mateo Valero. Hardware support for WCET analysis of hard real-time multicore systems. *ACM SIGARCH Computer Architecture News*, 37 (3):57–68, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pham-Quoc:2016:FBM

[PQNT16] Cuong Pham-Quoc, Biet Nguyen, and Tran Ngoc Thinh. FPGA-based multicore architecture for integrating multiple DDoS defense mechanisms. *ACM SIGARCH Computer Architecture News*, 44(4):14–19, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Parker:1982:GNM

[PR82] D. S. Parker and C. S. Raghavendra. The Gamma network: a multiprocessor interconnection network with redundant paths. *ACM SIGARCH Computer Architecture News*, 10(3):73–80, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Petric:2005:EEP

[PR05] Vlad Petric and Amir Roth. Energy-effectiveness of pre-execution and energy-aware P-thread selection. *ACM SIGARCH Computer Architecture News*, 33(2):322–333, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pramanik:1982:DF

[Pra82] Sakti Pramanik. Database filters. *ACM SIGARCH Computer Architecture News*, 10(3):201–210, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pai:1997:RRS

[PRA97] Vijay S. Pai, Parthasarathy Ranganathan, and Sarita V. Adve. RSIM: Rice simulator for ILP multiprocessors. *ACM SIGARCH Computer Architecture News*, 25(5):1, December 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Price:1991:TAD

[Pri91] Camille C. Price. Task allocation in data flow multiprocessors: an annotated bibliography. *ACM SIGARCH Computer Architecture News*, 19(1):128–134, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Parashar:2017:SAC

[PRM+17] Angshuman Parashar, Minsoo Rhu, Anurag Mukkara, Antonio Puglielli, Rangharajan Venkatesan, Brucek Khailany, Joel Emer, Stephen W. Keckler, and William J. Dally. SCNN: an accelerator for compressed-sparse convolutional neural networks. *ACM SIGARCH Computer Architecture News*, 45(2):27–40, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Przybylski:1990:PIB

[Prz90] Steven Przybylski. The performance impact of block sizes and fetch strategies. *ACM SIGARCH Computer Architecture News*, 18(3a):160–169, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Peuto:1977:ITM

[PS77] Bernard L. Peuto and Leonard J. Shustek. An instruction timing model of CPU performance. *ACM SIGARCH Computer Architecture News*, 5(7):165–178, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pleszkun:1988:PPM

[PS88] A. R. Pleszkun and G. S. Sohi. The performance potential of multiple functional unit processors. *ACM SIGARCH Computer Architecture News*, 16(2):37–44, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pnevmatikatos:1994:GEB

[PS94] D. N. Pnevmatikatos and G. S. Sohi. Guarded execution and branch prediction in dynamic ILP processors. *ACM SIGARCH Computer Architecture News*, 22(2):120–129, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Patterson:1998:RRR

[PS98a] David A. Patterson and Carlo H. Séquin. Retrospective: RISC I: a Reduced Instruction Set Computer. In ACM [ACM98a], pages 24–26. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. This paper contains in column 1, page 25, the story of the origin of the name “RISC”.

Patterson:1998:RRI

[PS98b] David A. Patterson and Carlo H. Sequin. RISC I: a reduced instruction set VLSI computer. In ACM [ACM98a], pages 216–230. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998.

URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Peuto:1998:ITM

[PS98c] Bernard L. Peuto and Leonard J. Shustek. An instruction timing model of CPU performance. In ACM [ACM98a], pages 152–165. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Panneerselvam:2012:COS

[PS12] Sankaralingam Panneerselvam and Michael M. Swift. Chameleon: operating system support for dynamic processors. *ACM SIGARCH Computer Architecture News*, 40 (1):99–110, March 2012. ASPLOS '12 conference proceedings.

Perais:2014:EPW

[PS14] Arthur Perais and André Seznec. EOLE: paving the way for an effective implementation of value prediction. *ACM SIGARCH Computer Architecture News*, 42 (3):481–492, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Putnam:2010:DVE

[PSB10] Andrew Putnam, Aaron Smith, and Doug Burger. Dynamic vectorization in the E2 dynamic multicore architecture. *ACM SIGARCH Computer Architecture News*, 38 (4):27–32, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pal:2013:FIN

[PSB13] Santanu Pal, Amitabha Sinha, and Pijush Biswas. FPGA implementation of a novel DCT architecture reducing constant cosine terms. *ACM SIGARCH Computer Architecture News*, 41(2):36–40, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Parashar:2006:SSB

[PSG06] Angshuman Parashar, Anand Sivasubramaniam, and Sudhanva Gurumurthi. SlicK: slice-based locality exploitation for efficient redundant multithreading. *ACM SIGARCH Computer Architecture News*, 34(5):95–105, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Park:2012:SDE

[PSP+12] Yongjun Park, Sangwon Seo, Hyunchul Park, Hyoun Kyu Cho, and Scott Mahlke. SIMD defragmenter: efficient ILP realization on data-parallel architectures. *ACM SIGARCH Computer Architecture News*, 40(1):363–374, March 2012. ASPLOS '12 conference proceedings.

Petric:2005:RRB

[PSR05] Vlad Petric, Tingting Sha, and Amir Roth. RENO: a rename-based instruction optimizer. *ACM SIGARCH Computer Architecture News*, 33(2):98–109, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Plotkin:1983:TSA

[PT83] Arieh Plotkin and Daniel Tabak. A Tree Structured Architecture for semantic gap reduction. *ACM SIGARCH Computer Architecture News*, 11(4):30–44, September 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pleszkun:1986:AEL

[PT86] A. R. Pleszkun and M. J. Thazhuthaveetil. An architecture for efficient Lisp list access. *ACM SIGARCH Computer Architecture News*, 14(2):191–198, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Papadopoulos:1991:MRV

[PT91] Gregory M. Papadopoulos and Kenneth R. Traub. Multithreading: a revisionist view of dataflow architectures. *ACM SIGARCH Computer Architecture News*, 19(3):342–351, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Prvulovic:2003:RUT

[PT03] Milos Prvulovic and Josep Torrellas. ReEnact: using thread-level speculation mechanisms to debug data races in multithreaded codes. *ACM SIGARCH Computer Architecture News*, 31(2):110–121, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pritchett:2010:SHS

[PT10] Timothy Pritchett and Mithuna Thottethodi. SieveStore: a highly-selective, ensemble-level disk cache for cost-performance. *ACM SIGARCH Computer Architecture News*, 38(3):163–174, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Phothilimthana:2016:SS

[PTBD16] Phitchaya Mangpo Phothilimthana, Aditya Thakur, Rastislav Bodik, and Dinakar Dhurjati. Scaling up superoptimization. *ACM SIGARCH Computer Architecture News*, 44(2):297–310, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Pai:2013:IGC

[PTG13] Sreepathi Pai, Matthew J. Thazhuthaveetil, and R. Govindarajan. Improving GPGPU concurrency with elastic kernels. *ACM SIGARCH Computer Architecture News*, 41 (1):407–418, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Palix:2011:FLT

[PTS+11] Nicolas Palix, Gaël Thomas, Suman Saha, Christophe Calvès, Julia Lawall, and Gilles Muller. Faults in Linux: ten years later. *ACM SIGARCH Computer Architecture News*, 39(1):305–318, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Powell:2003:PDM

[PV03] Michael D. Powell and T. N. Vijaykumar. Pipeline damping: a microarchitectural technique to reduce inductive noise in supply voltage. *ACM SIGARCH Computer Architecture News*, 31(2):72–83, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Powell:2004:ERB

[PV04] Michael D. Powell and T. N. Vijaykumar. Exploiting resonant behavior to reduce inductive noise. *ACM SIGARCH Computer Architecture News*, 32(2):288, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Peiron:1995:VMA

[PVAL95] Montse Peiron, Mateo Valero, Eduard Ayguadé, and Tomás Lang. Vector multiprocessors with arbitrated memory access. *ACM SIGARCH Computer Architecture News*, 23(2):243–252, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Powers:2017:BBG

[PVB17] Bobby Powers, John Vilk, and Emery D. Berger. Browsix: Bridging the gap between Unix and the browser. *ACM SIGARCH Computer Architecture News*, 45(1):253–266, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Paalvast:1990:MPP

[PvGS90] Edwin M. Paalvast, Arjan J. van Gemund, and Henk J. Sips. A method for parallel program generation with an application to the Booster language. *ACM SIGARCH*

Computer Architecture News, 18(3b):457–469, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Pinkston:1997:DIN

[PW97] Timothy Mark Pinkston and Sugath Warnakulasuriya. On deadlocks in interconnection networks. *ACM SIGARCH Computer Architecture News*, 25(2):38–49, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Plumbridge:2013:BPR

[PWA13] Gary Plumbridge, Jack Whitham, and Neil Audsley. Blueshell: a platform for rapid prototyping of multiprocessor NoCs and accelerators. *ACM SIGARCH Computer Architecture News*, 41(5):107–117, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Prabhakar:2017:PRA

[PZK+17] Raghu Prabhakar, Yaqi Zhang, David Koeplinger, Matt Feldman, Tian Zhao, Stefan Hadjis, Ardavan Pedram, Christos Kozyrakis, and Kunle Olukotun. Plasticine: a reconfigurable architecture for parallel paterns. *ACM SIGARCH Computer Architecture News*, 45(2):389–402, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Prvulovic:2002:RCE

[PZT02] Milos Prvulovic, Zheng Zhang, and Josep Torrellas. ReVive: cost-effective architectural support for rollback recovery in shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 30(2):111–122, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qiu:1998:ODA

[QD98] Xiaogang Qiu and Michel Dubois. Options for dynamic address translation in COMAs. *ACM SIGARCH Computer Architecture News*, 26(3):214–225, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qiu:1999:TLM

[QD99] Xiaogang Qiu and Michel Dubois. Tolerating late memory traps in ILP processors. *ACM SIGARCH Computer Architecture News*, 27 (2):76–87, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qureshi:2012:PIP

[QFJL12] Moinuddin K. Qureshi, Michele M. Franceschini, Ashish Jagmohan, and Luis A. Lastras. PreSET: improving performance of phase change memories by exploiting asymmetry in write times. *ACM SIGARCH Computer Architecture News*, 40 (3):380–391, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Qureshi:2010:MMS

[QFLMK10] Moinuddin K. Qureshi, Michele M. Franceschini, Luis A. Lastras-Montaño, and John P. Karidis. Morphable memory system: a robust architecture for exploiting multi-level phase change memories. *ACM SIGARCH Computer Architecture News*, 38(3):153–162, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qadeer:2013:CEB

[QHS+13] Wajahat Qadeer, Rehan Hameed, Ofer Shacham, Preethi Venkatesan, Christos Kozyrakis, and Mark A. Horowitz. Convolution engine: balancing efficiency & flexibility in specialized computing. *ACM SIGARCH Computer Architecture News*, 41 (3):24–35, June 2013. ICSA '13 conference proceedings.

Qureshi:2007:AIP

[QJP+07] Moinuddin K. Qureshi, Aamer Jaleel, Yale N. Patt, Simon C. Steely, and Joel Emer. Adaptive insertion policies for high performance caching. *ACM SIGARCH Computer Architecture News*, 35(2):381–391, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qureshi:2006:CMA

[QLMP06] Moinuddin K. Qureshi, Daniel N. Lynch, Onur Mutlu, and Yale N. Patt. A case for MLP-aware cache replacement. *ACM SIGARCH Computer Architecture News*, 34 (2):167–178, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Quammen:1991:FRM

[QM91] Donna J. Quammen and D. Richard Miller. Flexible register management for sequential programs. *ACM SIGARCH Computer Architecture News*, 19(3):320–329, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Quammen:1989:RWA

[QMT89] D. Quammen, D. R. Miller, and D. Tabak. Register window architecture for multitasking applications. *ACM SIGARCH Computer Architecture News*, 17(6):57–66, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qian:2014:PRR

[QSQ14] Xuehai Qian, Benjamin Sahelices, and Depei Qian. Pacifier: record and replay for relaxed-consistency multiprocessors with distributed directory protocol. *ACM SIGARCH Computer Architecture News*, 42 (3):433–444, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Qureshi:2009:SHP

[QSR09] Moinuddin K. Qureshi, Vijayalakshmi Srinivasan, and Jude A. Rivers. Scalable high performance main memory system using phase-change memory technology. *ACM SIGARCH Computer Architecture News*, 37(3):24–33, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qian:2014:ODB

[QST14] Xuehai Qian, Benjamin Sahelices, and Josep Torrellas. OmniOrder: directory-based conflict serialization of transactions. *ACM SIGARCH Computer Architecture News*, 42 (3):421–432, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Qureshi:2005:VWC

[QTP05] Moinuddin K. Qureshi, David Thompson, and Yale N. Patt. The V-Way Cache: Demand based associativity via global replacement. *ACM SIGARCH Computer Architecture News*, 33(2):544–555, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Qian:2013:VSP

[QTSQ13] Xuehai Qian, Josep Torrellas, Benjamin Sahelices, and Depei Qian. Volition: scalable and precise sequential consistency violation detection. *ACM SIGARCH Computer Architecture News*, 41 (1):535–548, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Quick:1979:IMP

[Qui79] G. E. Quick. Intelligent memory: "a parallel processing concept". *ACM SIGARCH Computer Architecture News*, 7(8):23–28, June 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Quinton:1984:ASS

[Qui84] Patrice Quinton. Automatic synthesis of systolic arrays from uniform recurrent equations. *ACM SIGARCH Computer Architecture News*, 12(3):208–214, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Quong:1994:ECM

[Quo94] R. W. Quong. Expected I-cache miss rates via the gap model. *ACM SIGARCH Computer Architecture News*, 22(2):372–383, April 1994.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ruhl:1990:PFC

[RA90] Roland Rühl and Marco Annaratone. Parallelization of FORTRAN code on distributed-memory parallel processors. *ACM SIGARCH Computer Architecture News*, 18(3b):342–353, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reinman:1999:SFE

[RAC99] Glenn Reinman, Todd Austin, and Brad Calder. A scalable front-end architecture for fast instruction delivery. *ACM SIGARCH Computer Architecture News*, 27(2):234–245, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Radin:1982:M

[Rad82] George Radin. The 801 minicomputer. *ACM SIGARCH Computer Architecture News*, 10(2):39–47, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ranganathan:1999:PIV

[RAJ99] Parthasarathy Ranganathan, Sarita Adve, and Norman P. Jouppi. Performance of image and video processing with general-purpose processors and media ISA extensions. *ACM SIGARCH Computer Architecture News*, 27(2):124–135, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ranganathan:2000:RCT

[RAJ00] Parthasarathy Ranganathan, Sarita Adve, and Norman P. Jouppi. Reconfigurable caches and their application to media processing. *ACM SIGARCH Computer Architecture News*, 28(2):214–224, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramamoorthy:1978:RSC

[Ram78] C. V. Ramamoorthy. Review of *Structured Computer Organization* by Andrew S. Tanenbaum, Prentice-Hall 1976. *ACM SIGARCH Computer Architecture News*, 7(1): 23, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramachandran:1988:PSI

[Ram88] Umakishore Ramachandran. Preface to the Special Issue on Architectural Support for Operating Systems. *ACM SIGARCH Computer Architecture News*, 16(4):11, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosner:2004:PAT

[RAM+04] Roni Rosner, Yoav Almog, Micha Moffie, Naftali

Schwartz, and Avi Mendelson. Power awareness through selective dynamically optimized traces. *ACM SIGARCH Computer Architecture News*, 32 (2):162, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Randell:1985:HST

[Ran85] Brian Randell. Hardware/ software tradeoffs: a general design principle? *ACM SIGARCH Computer Architecture News*, 13(2):19–21, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rao:1984:JEE

[Rao84] T. R. N. Rao. Joint encryption and error correction schemes. *ACM SIGARCH Computer Architecture News*, 12(3):240–241, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rattner:1982:HSC

[Rat82] Justin Rattner. Hardware/ software cooperation in the iAPX-432. *ACM SIGARCH Computer Architecture News*, 10(2):1, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rattner:1985:CMT

[Rat85] J. Rattner. Commercial multiprocessors (title only). *ACM SIGARCH Computer Architecture News*, 13(3):214, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rau:1991:PRI

[Rau91] B. Ramakrishna Rau. Pseudo-randomly interleaved memory. *ACM SIGARCH Computer Architecture News*, 19 (3):74–83, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reddy:1989:SPD

[RB89] A. L. N. Reddy and P. Banerjee. A study parallel disk organizations. *ACM SIGARCH Computer Architecture News*, 17(5):40–47, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reddy:1990:SBP

[RB90] A. L. Narasimha Reddy and Prithviraj Banerjee. A study of I/O behavior of perfect benchmarks on a multiprocessor. *ACM SIGARCH Computer Architecture News*, 18(3a):312–321, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rudd:1984:HPF

[RBC84] W. G. Rudd, Duncan A. Buell, and Donald M. Chiarulli. A high performance factoring machine. *ACM SIGARCH Computer Architecture News*, 12(3):297–300, June 1984. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Ramirez:2001:CLO

[RBG+01] Alex Ramirez, Luiz André Barroso, Kourosh Gharachorloo, Robert Cohn, Josep Larriba-Pey, P. Geoffrey Lowney, and Mateo Valero. Code layout optimizations for transaction processing workloads. *ACM SIGARCH Computer Architecture News*, 29(2):155–164, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramacher:2003:GVP

[RBH+03] Ulrich Ramacher, Nico Brüs, Ulrich Hachmann, Jens Harnisch, Wolfgang Raab, and Axel Techmer. 100 GOPS vision processor for automotive applications. *ACM SIGARCH Computer Architecture News*, 31(1):60–68, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramos:2007:DPC

[RBIV07] Luis M. Ramos, José Luis Briz, Pablo E. Ibáñez, and Victor Viñals. Data prefetching in a cache hierarchy with high bandwidth and capacity. *ACM SIGARCH Computer Architecture News*, 35 (4):37–44, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Roesner:2008:CDP

[RBK08] Franziska Roesner, Doug Burger, and Stephen W. Keckler. Counting dependence predictors. *ACM SIGARCH Computer Architecture News*, 36(3):215–226, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Romanescu:2007:VSC

[RBOS07] Bogdan F. Romanescu, Michael E. Bauer, Sule Ozev, and Daniel J. Sorin. VariaSim: simulating circuits and systems in the presence of process variability. *ACM SIGARCH Computer Architecture News*, 35(5):45–48, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Raasch:2002:SIQ

[RBR02] Steven E. Raasch, Nathan L. Binkert, and Steven K. Reinhardt. A scalable instruction queue design using dependence chains. *ACM SIGARCH Computer Architecture News*, 30(2):318–329, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rakvic:2000:CTM

[RBS00] Ryan Rakvic, Bryan Black, and John Paul Shen. Completion time multiple branch prediction for enhancing trace cache performance. *ACM*

SIGARCH Computer Architecture News, 28(2):47–58, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rattner:1980:OBC

[RC80] Justin Rattner and George Cox. Object-based computer architecture. *ACM SIGARCH Computer Architecture News*, 8(6):4–11, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramamoorthy:1991:BMC

[RC91] Ganesh Ramamoorthy and Alok N. Choudhary. A bibliography for multiprocessor cache memories. *ACM SIGARCH Computer Architecture News*, 19(4):138–153, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ros:2017:NSL

[RCAK17] Alberto Ros, Trevor E. Carlson, Mehdi Alipour, and Stefanos Kaxiras. Non-speculative load-load reordering in TSO. *ACM SIGARCH Computer Architecture News*, 45(2):187–200, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Reddi:2005:PDC

[RCC05] Vijay Janapa Reddi, Dan Connors, and Robert S. Cohn. Persistence in dynamic code transformation systems. *ACM SIGARCH Computer Architecture News*, 33(5):69–74, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Radoy:1973:MPP

[RCL73] Charles H. Radoy, George P. Copeland, Jr., and G. J. Lipovski. A methodology for parallel processing design tradeoffs. *ACM SIGARCH Computer Architecture News*, 2(4):51–56, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Radojkovic:2012:OTA

[RCM+12] Petar Radojković, Vladimir Cakarević, Miquel Moretó, Javier Verdú, Alex Pajuelo, Francisco J. Cazorla, Mario Nemirovsky, and Mateo Valero. Optimal task assignment in multithreaded processors: a statistical approach. *ACM SIGARCH Computer Architecture News*, 40(1):235–248, March 2012. ASPLOS '12 conference proceedings.

Reis:2005:DEH

[RCV+05] George A. Reis, Jonathan Chang, Neil Vachharajani, Ram Rangan, David I. August, and Shubhendu S. Mukherjee. Design and evaluation of hybrid fault-detection systems. *ACM SIGARCH Computer Architecture News*, 33(2):148–159, May 2005.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ronsse:2001:JRJ

[RD01] Michiel Ronsse and Koen De Bosschere. JiTI: a robust just in time instrumentation technique. *ACM SIGARCH Computer Architecture News*, 29(1):43–54, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rixner:2000:MAS

[RDK+00] Scott Rixner, William J. Dally, Ujval J. Kapasi, Peter Mattson, and John D. Owens. Memory access scheduling. *ACM SIGARCH Computer Architecture News*, 28(2):128–138, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rhu:2012:CPC

[RE12] Minsoo Rhu and Mattan Erez. CAPRI: prediction of compaction-adequacy for handling control-divergence in GPGPU architectures. *ACM SIGARCH Computer Architecture News*, 40(3): 61–71, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Rhu:2013:MSR

[RE13] Minsoo Rhu and Mattan Erez. Maximizing SIMD resource utilization in GPGPUs with SIMD lane permutation. *ACM SIGARCH Computer Architecture News*, 41(3):356–367, June 2013. ICSA '13 conference proceedings.

Reddaway:1973:DDA

[Red73] S. F. Reddaway. DAP—a distributed array processor. *ACM SIGARCH Computer Architecture News*, 2(4):61–65, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reddy:1992:SSO

[Red92] A. L. Narasimha Reddy. A study of I/O system organizations. *ACM SIGARCH Computer Architecture News*, 20(2):308–317, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reed:1980:WFC

[Ree80] Karl Reed. The way forward in computer architecture research. *ACM SIGARCH Computer Architecture News*, 8(7): 3–7, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reed:1982:GPM

[Ree82] Karl Reed. On a general property of memory mapping tables. *ACM SIGARCH Computer Architecture News*, 10(2):81–86, March 1982. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Rege:1976:CPS

[Reg76] S. L. Rege. Cost, performance and size tradeoffs for different levels in a memory hierarchy. *ACM SIGARCH Computer Architecture News*, 4(4): 64–67, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Redstone:2000:AOS

[REL00] Joshua A. Redstone, Susan J. Eggers, and Henry M. Levy. An analysis of operating system behavior on a simultaneous multithreaded architecture. *ACM SIGARCH Computer Architecture News*, 28 (5):245–256, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Requa:1983:PDF

[Req83] Joseph E. Requa. The Piecewise Data Flow architecture control flow and register management. *ACM SIGARCH Computer Architecture News*, 11(3):84–89, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Raghavan:2013:CSH

[RES+13] Arun Raghavan, Laurel Emurian, Lei Shao, Marios Papaefthymiou, Kevin P. Pipe, Thomas F. Wenisch, and Milo M. K. Martin. Computational sprinting on a hardware/software testbed. *ACM SIGARCH Computer Architecture News*, 41(1):155–166, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Reynolds:1982:SRA

[Rey82] Paul F. Reynolds, Jr. A shared resource algorithm for distributed simulation. *ACM SIGARCH Computer Architecture News*, 10(3):259–266, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rauchwerger:1990:MFP

[RF90] Lawrence Rauchwerger and Michael P. Farmwald. A multiple floating point coprocessor architecture. *ACM SIGARCH Computer Architecture News*, 18(2):15–24, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rose:1996:CIT

[RF96] Charlton D. Rose and J. Kelly Flanagan. Constructing instruction traces from cache-filtered address traces (CITCAT). *ACM SIGARCH Computer Architecture News*, 24(5):1–8, December 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rabbat:1988:TDC

[RFK88] Guy Rabbat, Borko Furht, and Ron Kibler. Three-dimensional computers and measuring their performance. *ACM SIGARCH Computer Architecture News*, 16(3):9–16, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rau:1988:DTR

[RFS88] D. Rau, J. A. B. Fortes, and H. J. Siegel. Destination tag routing techniques based on a state model for the LADM network. *ACM SIGARCH Computer Architecture News*, 16(2):318–324, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rodohan:1991:OAO

[RG91] D. P. Rodohan and R. J. Glover. An overview of the A architecture for optimisation problems in a logic programming environment. *ACM SIGARCH Computer Architecture News*, 19(4):124–131, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rajwar:2002:TLF

[RG02] Ravi Rajwar and James R. Goodman. Transactional lock-free execution of lock-based programs. *ACM SIGARCH Computer Architecture News*, 30(5):5–17, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramani:2009:SSF

[RGD09] Karthik Ramani, Christiaan P. Gribble, and Al Davis. StreamRay: a stream filtering architecture for coherent ray tracing. *ACM SIGARCH Computer Architecture News*, 37(1):325–336, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Rau:1982:ASE

[RGG82] B. R. Rau, C. D. Glaeser, and E. M. Greenawalt. Architectural support for the efficient generation of code for horizontal architectures. *ACM SIGARCH Computer Architecture News*, 10(2):96–99, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rau:1982:ECG

[RGP82] B. Ramakrishna Rau, Christopher D. Glaeser, and Raymond L. Picard. Efficient code generation for horizontal architectures: Compiler techniques and architectural support. *ACM SIGARCH Computer Architecture News*, 10(3):131–139, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ryoo:2017:RTD

[RGSJ17] Jee Ho Ryoo, Nagendra Gulur, Shuang Song, and Lizy K. John. Rethinking TLB designs in virtualized environments: a very large part-of-memory TLB. *ACM SIGARCH Computer Architecture News*, 45 (2):469–480, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Rajwar:2005:VTM

[RHL05] Ravi Rajwar, Maurice Herlihy, and Konrad Lai. Virtualizing transactional memory. *ACM SIGARCH Computer Architecture News*, 33(2):494–505, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rajbhandari:2017:OCM

[RHR+17] Samyam Rajbhandari, Yuxiong He, Olatunji Ruwase, Michael Carbin, and Trishul Chilimbi. Optimizing CNNs on multicores for scalability, performance and goodput. *ACM SIGARCH Computer Architecture News*, 45 (1):267–280, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Rexford:1996:RAR

[RHS96] Jennifer Rexford, John Hall, and Kang G. Shin. A router architecture for real-time point-to-point networks. *ACM SIGARCH Computer Architecture News*, 24(2):237–246, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rannem:1974:RSC

[RHZC74] S. Rannem, V. C. Hamacher, S. G. Zaky, and P. Connolly. On relating small computer performance to design parameters. *ACM SIGARCH Computer Architecture News*, 3(4):146–151, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Riad:1980:CFC

[Ria80] Mokhtar Boshra Riad. A combination of field and current access techniques for efficient and cost-effective bubble memories. *ACM SIGARCH Computer Architecture News*, 8(3):202–210, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Richards:1980:CE

[Ric80] Dana Richards. On a "Counter–Example". *ACM SIGARCH Computer Architecture News*, 8(2):2–3, April 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ridoux:1987:DSM

[Rid87] O. Ridoux. Deterministic and stochastic modeling of parallel garbage collection: towards real-time criteria. *ACM*

SIGARCH Computer Architecture News, 15(2):128–136, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ris:1976:UDF

[Ris76] Frederic N. Ris. A unified decimal floating-point architecture for the support of high-level languages. *ACM SIGARCH Computer Architecture News*, 5(4):21–31, October 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rivest:1979:BCA

[Riv79] Ronald L. Rivest. The BLIZZARD computer architecture. *ACM SIGARCH Computer Architecture News*, 7(9):2–10, August 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rogers:2009:SBW

[RKB+09] Brian M. Rogers, Anil Krishna, Gordon B. Bell, Ken Vu, Xiaowei Jiang, and Yan Solihin. Scaling the bandwidth wall: challenges in and avenues for CMP scaling. *ACM SIGARCH Computer Architecture News*, 37(3):371–382, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ruwase:2014:GHF

[RKGM14] Olatunji Ruwase, Michael A. Kozuch, Phillip B. Gibbons, and Todd C. Mowry. Guardrail: a high fidelity approach to protecting hardware devices from buggy drivers. *ACM SIGARCH Computer Architecture News*, 42(1):655–670, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Raman:2010:SPU

[RKM+10] Arun Raman, Hanjun Kim, Thomas R. Mason, Thomas B. Jablin, and David I. August. Speculative parallelization using software multi-threaded transactions. *ACM SIGARCH Computer Architecture News*, 38(1):65–76, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ryzhyk:2011:IDD

[RKM+11] Leonid Ryzhyk, John Keys, Balachandra Mirla, Arun Raghunath, Mona Vij, and Gernot Heiser. Improved device driver reliability through hardware verification reuse. *ACM SIGARCH Computer Architecture News*, 39(1):133–144, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Radoy:1974:SMI

[RL74a] C. H. Radoy and G. J. Lipovski. Switched multiple instruction, multiple data stream processing. *ACM SIGARCH Computer Architecture News*, 3(4):183–187, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reames:1974:LNS

[RL74b] Cecil C. Reames and Ming T. Liu. A loop network for simultaneous transmission of variable-length messages. *ACM SIGARCH Computer Architecture News*, 3(4):7–12, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reames:1976:DSD

[RL76] Cecil C. Reames and Ming T. Liu. Design and simulation of the distributed loop computer network (DLCN). *ACM SIGARCH Computer Architecture News*, 4(4):124–129, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ribic:2014:EEW

[RL14] Haris Ribic and Yu David Liu. Energy-efficient work-stealing language runtimes. *ACM SIGARCH Computer Architecture News*, 42(1):513–528, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ravi:2017:CCH

[RL17] Gokul Subramanian Ravi and Mikko H. Lipasti. CHARSTAR: Clock Hierarchy Aware Resource Scaling in Tiled ARchitectures. *ACM SIGARCH Computer Architecture News*, 45(2):147–160, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Reddi:2010:WSU

[RLCV10] Vijay Janapa Reddi, Benjamin C. Lee, Trishul Chilimbi, and Kushagra Vaid. Web search using mobile cores: quantifying and mitigating the price of efficiency. *ACM SIGARCH Computer Architecture News*, 38(3):314–325, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ren:2017:SDH

[RLD+17] Ao Ren, Zhe Li, Caiwen Ding, Qinru Qiu, Yanzhi Wang, Ji Li, Xuehai Qian, and Bo Yuan. SC-DCNN: Highly-scalable deep convolutional neural network using stochastic computing. *ACM SIGARCH Computer Architecture News*, 45(1):405–418, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ranganathan:2006:ELP

[RLIC06] Parthasarathy Ranganathan, Phil Leech, David Irwin, and Jeffrey Chase. Ensemble-level power management for dense blade servers. *ACM SIGARCH Computer Architecture News*, 34(2):66–77, 2006. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Romanescu:2010:SDV

[RLS10] Bogdan F. Romanescu, Alvin R. Lebeck, and Daniel J. Sorin. Specifying and dynamically verifying address translation-aware memory consistency. *ACM SIGARCH Computer Architecture News*, 38(1):323–334, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reinhardt:1994:TTU

[RLW94] S. K. Reinhardt, J. R. Larus, and D. A. Wood. Tempest and Typhoon: user-level shared memory. *ACM SIGARCH Computer Architecture News*, 22(2):325–336, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reinhardt:1998:RTT

[RLW98a] Steven K. Reinhardt, James R. Larus, and David A. Wood. Retrospective: Tempest and Typhoon: user-level shared memory. In ACM [ACM98a], pages 98–102. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Reinhardt:1998:TTU

[RLW98b] Steven K. Reinhardt, James R. Larus, and David A. Wood. Tempest and Typhoon: user-level shared memory. In ACM [ACM98a], pages 497–508. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Ravi:1977:HMS

[RM77] C. V. Ravi and Torben Moller. A hierarchical microcomputer system for hardware and software development. *ACM SIGARCH Computer Architecture News*, 5(7): 35–40, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reinhardt:2000:TFD

[RM00] Steven K. Reinhardt and Shubhendu S. Mukherjee. Transient fault detection via simultaneous multithreading. *ACM SIGARCH Computer Architecture News*, 28(2):25–36, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Richards:1974:HSI

[RO74] H. Richards, Jr. and A. E. Oldehoeft. Hardware-software interactions in SYMBOL-2R's operating system. *ACM SIGARCH Computer Architecture News*, 3(4):113–118, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramanathan:1993:SCP

[RO93] Gowri Ramanathan and Joel Oren. Survey of commercial parallel machines. *ACM SIGARCH Computer Architecture News*, 21(3):13–33, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Roberts:1978:SCA

[Rob78] David C. Roberts. A specialized computer architecture for text retrieval. *ACM SIGARCH Computer Architecture News*, 7(2):51–59, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rockey:1985:DAS

[Roc85] Mark Rockey. The dataflow architecture: a suitable base for the implementation of expert systems. *ACM SIGARCH Computer Architecture News*, 13(4):8–14, September 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rockley:1994:MTE

[Roc94] Ann Rockley. Multimedia: towards an electronic performance support system. *ACM SIGARCH Computer Architecture News*, 22(5):61–65, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rodgers:1985:IMS

[Rod85] David P. Rodgers. Improvements in multiprocessor system design. *ACM SIGARCH Computer Architecture News*, 13(3):225–231, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Romer:1995:RTM

[ROKB95] Theodore H. Romer, Wayne H. Ohlrich, Anna R. Karlin, and Brian N. Bershad. Reducing TLB and memory overhead using online superpage promotion. *ACM SIGARCH Computer Architecture News*, 23(2):176–187, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Roos:1989:RTS

[Roo89] J. Roos. A real-time support processor for Ada tasking. *ACM SIGARCH Computer Architecture News*, 17(2):162–171, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rossmann:1973:RWC

[Ros73] George Rossmann. Review of the *Workshop on Computer Architecture Education*. *ACM SIGARCH Computer Architecture News*, 2(4):211–214, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rossmann:1976:ICS

[Ros76] George E. Rossmann. The IEEE Computer Society task force on computer architecture. *ACM SIGARCH Computer Architecture News*, 4(4): 33, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosenthal:1977:DMM

[Ros77a] Robert S. Rosenthal. The data management machine, a classification. *ACM SIGARCH Computer Architecture News*, 6(2):35–39, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosin:1977:SM

[Ros77b] Robert F. Rosin. The significance of microprogramming. *ACM SIGARCH Computer Architecture News*, 6(1):14–19, June 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosenberg:1989:EEI

[Ros89] Arnold Rosenberg. Efficient emulations of interconnection networks. *ACM SIGARCH Computer Architecture News*, 17(6):67–79, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosenbaum:1996:AP

[Ros96] Mark Rosenbaum. Architectural potholes. *ACM SIGARCH Computer Architecture News*, 24(4):17–18, September 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rosenblum:2006:IVC

[Ros06] Mendel Rosenblum. Impact of virtualization on computer architecture and operating systems. *ACM SIGARCH Computer Architecture News*, 34(5):1, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Roth:2005:SVW

[Rot05] Amir Roth. Store Vulnerability Window (SVW): Reexecution filtering for enhanced load optimization. *ACM SIGARCH Computer Architecture News*, 33(2):458–468, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rouse:1986:TDH

[Rou86] Larry O'Neal Rouse. The twisted double helix: a minimum distance architecture for 5th generation computing. *ACM SIGARCH Computer Architecture News*, 14 (3):27–33, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ram:1985:PGC

[RP85] Ashwin Ram and Janak H. Patel. Parallel garbage collection without synchronization overhead. *ACM SIGARCH Computer Architecture News*, 13 (3):84–90, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rao:1999:SAU

[RP99] Amit Rao and Santosh Pande. Storage assignment using expression tree transformations to generate compact and efficient DSP code. *ACM SIGARCH Computer Architecture News*, 27(1):39–42, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ranganathan:1997:ISP

[RPASA97] Parthasarathy Ranganathan, Vijay S. Pai, Hazim Abdel-Shafi, and Sarita V. Adve. The interaction of software prefetching with ILP processors in shared-memory systems. *ACM SIGARCH Computer Architecture News*, 25(2):144–156, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramirez:2007:EST

[RPSV07] Tanausú Ramírez, Alex Pajuelo, Oliverio J. Santana, and Mateo Valero. Energy saving through a simple load control mechanism. *ACM SIGARCH Computer Architecture News*, 35(4):29–36, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reinhardt:1996:DHS

[RPW96] Steven K. Reinhardt, Robert W. Pfile, and David A. Wood. Decoupled hardware support for distributed shared memory. *ACM SIGARCH Computer Architecture News*, 24 (2):34–43, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rau:1977:EIF

[RR77] Ramakrishna B. Rau and George E. Rossmann. The effect of instruction fetch strategies upon the performance of pipelined instruction units. *ACM SIGARCH Computer Architecture News*, 5(7):80–89, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Regehr:2004:HSA

[RR04] John Regehr and Alastair Reid. HOIST: a system for automatically deriving static analyzers for embedded systems. *ACM SIGARCH Computer Architecture News*, 32

(5):133–143, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Reddy:2006:UPB

[RRP06] Vimal K. Reddy, Eric Rotenberg, and Sailashri Parthasarathy. Understanding prediction-based partial redundant threading for low-overhead, high-coverage fault tolerance. *ACM SIGARCH Computer Architecture News*, 34(5):83–94, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramadan:2007:MTT

[RRP+07] Hany E. Ramadan, Christopher J. Rossbach, Donald E. Porter, Owen S. Hofmann, Aditya Bhandari, and Emmett Witchel. MetaTM/TxLinux: transactional memory for an operating system. *ACM SIGARCH Computer Architecture News*, 35(2):92–103, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rajamani:2009:IDE

[RRRV09] Sriram Rajamani, G. Ramalingam, Venkatesh Prasad Ranganath, and Kapil Vaswani. ISOLATOR: dynamically ensuring isolation in comcurrent programs. *ACM SIGARCH Computer Architecture News*, 37(1):181–192, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Raghavendra:2008:NPS

[RRT+08] Ramya Raghavendra, Parthasarathy Ranganathan, Vanish Talwar, Zhikui Wang, and Xiaoyun Zhu. No 'power' struggles: coordinated multi-level power management for the data center. *ACM SIGARCH Computer Architecture News*, 36(1):48–59, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rudolph:1984:DDC

[RS84] Larry Rudolph and Zary Segall. Dynamic decentralized cache schemes for MIMD parallel processors. *ACM SIGARCH Computer Architecture News*, 12(3):340–347, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Roth:1999:EJP

[RS99] Amir Roth and Gurindar S. Sohi. Effective jump-pointer prefetching for linked data structures. *ACM SIGARCH Computer Architecture News*, 27(2):111–121, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ringenburg:2015:MDQ

[RSA+15] Michael Ringenburg, Adrian Sampson, Isaac Ackerman, Luis Ceze, and Dan Grossman. Monitoring and debugging the quality of results in approximate programs. *ACM SIGARCH Computer Architecture News*, 43 (1):399–411, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Rabbah:2004:COP

[RSEW04] Rodric M. Rabbah, Hariharan Sandanagobalane, Mongkol Ekpanyapong, and Weng-Fai Wong. Compiler orchestrated prefetching via speculation and predication. *ACM SIGARCH Computer Architecture News*, 32(5):189–198, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ransford:2011:MSS

[RSF11] Benjamin Ransford, Jacob Sorber, and Kevin Fu. Mementos: system support for long-running computation on RFID-scale devices. *ACM SIGARCH Computer Architecture News*, 39(1):159–170, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rothberg:1993:WSC

[RSG93] Edward Rothberg, Jaswinder Pal Singh, and Anoop Gupta. Working sets, cache sizes, and node granularity issues for large-scale multiprocessors. *ACM SIGARCH Computer Architecture News*, 21 (2):14–26, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rountree:2005:NH

[RSLF05] Barry Rountree, Robert Springer, David K. Lowenthal, and Vincent W. Freeh. Notes from HPPAC 2005. *ACM SIGARCH Computer Architecture News*, 33(4):108–112, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rogers:2005:MPH

[RSP05] Brian Rogers, Yan Solihin, and Milos Prvulovic. Memory predecryption: hiding the latency overhead of memory encryption. *ACM SIGARCH Computer Architecture News*, 33(1):27–33, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramachandran:1987:HSI

[RSV87] U. Ramachandran, M. Solomon, and M. Vernon. Hardware support for interprocess communication. *ACM SIGARCH Computer Architecture News*, 15(2):178–188, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramaswamy:2006:DTC

[RSYP06] Subramanian Ramaswamy, Jaswanth Sreeram, Sudhakar Yalamanchili, and Krishna V. Palem. Data trace cache: an application specific cache architecture. *ACM SIGARCH Computer Architecture News*, 34(1):11–18, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Radhakrishnan:2000:AIE

[RTJ00] Ramesh Radhakrishnan, Deependra Talla, and Lizy Kurian John. Allowing for ILP in an embedded Java processor. *ACM SIGARCH Computer Architecture News*, 28(2):294–305, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rashid:1987:MIV

[RTY+87] Richard Rashid, Avadis Tevanian, Michael Young, David Golub, and Robert Baron. Machine-independent virtual memory management for paged uniprocessor and multiprocessor architectures. *ACM SIGARCH Computer Architecture News*, 15(5):31–39, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ruighaver:1986:DAD

[Rui86] A. B. Ruighaver. Design aspects of the Delft Parallel Processor DPP84 and its programming system. *ACM SIGARCH Computer Architecture News*, 14(1):4–8, January 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ruighaver:1990:MND

[Rui90] A. B. Ruighaver. A modular network for dense optical interconnection of processing elements. *ACM SIGARCH Computer Architecture News*, 18(2):69–75, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramakrishnan:1984:MMM

[RV84] I. V. Ramakrishnan and P. J. Varman. Modular matrix multiplication on a linear array. *ACM SIGARCH Computer Architecture News*, 12(3):232–238, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ramseyer:1977:MMI

[RvD77] Richard R. Ramseyer and Andries van Dam. A multi-microprocessor implementation of a general purpose pipelined CPU. *ACM SIGARCH Computer Architecture News*, 5(7):29–34, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Rul:2007:FLP

[RVD07] Sean Rul, Hans Vandierendonck, and Koen De Bosschere. Function level parallelism driven by data dependencies. *ACM SIGARCH Computer Architecture News*, 35(1):55–62, March 2007. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Ruan:2014:TLC

[RVLS14] Wenjia Ruan, Trilok Vyas, Yujie Liu, and Michael Spear. Transactionalizing legacy code: an experience report using GCC and Memcached. *ACM SIGARCH Computer Architecture News*, 42(1):399–412, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Reagen:2016:MEL

[RWA+16] Brandon Reagen, Paul Whatmough, Robert Adolf, Saketh Rama, Hyunkwang Lee, Sae Kyu Lee, José Miguel Hernández-Lobato, Gu-Yeon Wei, and David Brooks. Minerva: enabling low-power, highly-accurate deep neural network accelerators. *ACM SIGARCH Computer Architecture News*, 44(3):267–278, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Rangan:2009:TMF

[RWB09] Krishna K. Rangan, Gu-Yeon Wei, and David Brooks. Thread motion: fine-grained power management for multi-core systems. *ACM SIGARCH Computer Architecture News*, 37(3):302–313, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ren:2013:DSE

[RYF+13] Ling Ren, Xiangyao Yu, Christopher W. Fletcher, Marten van Dijk, and Srinivas Devadas. Design space exploration and optimization of path oblivious RAM in secure processors. *ACM SIGARCH Computer Architecture News*, 41(3):571–582, June 2013. ICSA '13 conference proceedings.

Rymarczyk:1982:CGP

[Rym82] James W. Rymarczyk. Coding guidelines for pipelined processors. *ACM SIGARCH Computer Architecture News*, 10(2):12–19, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ruggiero:1980:MBV

[RZ80] M. D. Ruggiero and S. G. Zaky. A microprocessor-based virtual memory system. *ACM SIGARCH Computer Architecture News*, 8(3):228–235, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srini:1983:ACA

[SA83] Vason P. Srini and Jorge F. Asenjo. Analysis of Cray-1S architecture. *ACM SIGARCH Computer Architecture News*, 11(3):194–206, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Somani:1984:EVD

[SA84] Arun K. Somani and Vinod K. Agarwal. An efficient VLSI dictionary machine. *ACM SIGARCH Computer Architecture News*, 12(3):142–150, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shobatake:1986:UPB

[SA86] Y. Shobatake and H. Aiso. A unification processor based on a uniformly structured cellular hardware. *ACM SIGARCH Computer Architecture News*, 14(2):128–139, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shippen:1987:TTD

[SA87] G. B. Shippen and J. K. Archibald. A tagged token dataflow machine for computing small, iterative algorithms. *ACM SIGARCH Computer Architecture News*, 15(6):9–18, December 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shukla:1988:KIP

[SA88a] S. B. Shukla and D. P. Agrawal. A kernel-independent, pipelined architecture for real-time 2-D convolution. *ACM SIGARCH Computer Architecture News*, 16(2):160–166, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sites:1988:MCA

[SA88b] R. L. Sites and A. Agarwal. Multiprocessor cache analysis using ATUM. *ACM SIGARCH Computer Architecture News*, 16(2):186–195, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shukla:1991:SPC

[SA91] Shridhar B. Shukla and Dharma P. Agrawal. Scheduling pipelined communication in distributed memory multiprocessors for real-time applications. *ACM SIGARCH Computer Architecture News*, 19(3):222–231, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sayeed:1992:PMB

[SA92] M. A. Sayeed and M. Atiquzzaman. Performance of multiple-bus multiprocessor under non-uniform memory reference model (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):432, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Soundararajan:2010:IMO

[SA10] Vijayaraghavan Soundararajan and Jennifer M. Anderson. The impact of management operations on the virtualized datacenter. *ACM SIGARCH Computer Architecture News*, 38(3):326–337, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sung:2015:DES

[SA15] Hyojin Sung and Sarita V. Adve. DeNovoSync: Efficient support for arbitrary synchronization without writer-initiated invalidations. *ACM SIGARCH Computer Architecture News*, 43(1):545–559, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sinclair:2017:CRS

[SAA17] Matthew D. Sinclair, Johnathan Alsop, and Sarita V. Adve. Chasing away RAts: Semantics and evaluation for relaxed atomics on heterogeneous systems. *ACM SIGARCH Computer Architecture News*, 45 (2):161–174, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Schulz:2005:SDB

[SAB+05] Martin Schulz, Dong Ahn, Andrew Bernat, Bronis R. de Supinski, Steven Y. Ko, Gregory Lee, and Barry Rountree. Scalable dynamic binary instrumentation for Blue Gene/L. *ACM SIGARCH Computer Architecture News*, 33(5):9–14, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srinivasan:2004:CLR

[SABR04] Jayanth Srinivasan, Sarita V. Adve, Pradip Bose, and Jude A. Rivers. The case for lifetime reliability-aware microprocessors. *ACM SIGARCH Computer Architecture News*, 32(2):276, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srinivasan:2005:ESD

[SABR05] Jayanth Srinivasan, Sarita V. Adve, Pradip Bose, and Jude A. Rivers. Exploiting structural duplication for lifetime reliability enhancement. *ACM SIGARCH Computer Architecture News*, 33(2):520–531, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sachs:1983:BRR

[Sac83] M. W. Sachs. Book reviews: Review of *Microcomputer Interfacing* by G. Jack Lipovski, Lexington Books 1980. *ACM SIGARCH Computer Architecture News*, 11(1):55, March 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sivathanu:2002:ERA

[SADAD02] Muthian Sivathanu, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau.

Evolving RPC for active storage. *ACM SIGARCH Computer Architecture News*, 30 (5):264–276, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Scott:2006:BHR

[SAKD06] Steve Scott, Dennis Abts, John Kim, and William J. Dally. The BlackWidow high-radix Clos network. *ACM SIGARCH Computer Architecture News*, 34(2):16–28, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Salisbury:1976:MMC

[Sal76] Alan B. Salisbury. MCF: a military computer family for computer-based systems. *ACM SIGARCH Computer Architecture News*, 5(4):17–20, October 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seo:2005:NOW

[SAL+05] Daeho Seo, Akif Ali, Won-Taek Lim, Nauman Rafique, and Mithuna Thottethodi. Near-optimal worst-case throughput routing for two-dimensional mesh networks. *ACM SIGARCH Computer Architecture News*, 33(2):432–443, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shen:1999:CRF

[SAR99] Xiaowei Shen, Arvind, and Larry Rudolph. Commit-reconcile & fences (CRF): a new memory model for architects and compiler writers. *ACM SIGARCH Computer Architecture News*, 27(2):150–161, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1990:IDA

[SAS90] Kevin Smith, Bill Appelbe, and Kurt Stirewalt. Incremental dependence analysis for interactive parallelization. *ACM SIGARCH Computer Architecture News*, 18(3b):330–341, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Satterfield:1974:AAS

[Sat74] James M. Satterfield. Architectural advances of the space shuttle orbiter avionics computer system. *ACM SIGARCH Computer Architecture News*, 3(4):95–98, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Savage:1985:PPL

[Sav85] Jim Savage. Parallel processing as a language design problem. *ACM SIGARCH Computer Architecture News*, 13(3):221–224, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sullivan:1977:LSHa

[SB77] Herbert Sullivan and T. R. Bashkow. A large scale, homogeneous, fully distributed parallel machine, I. *ACM SIGARCH Computer Architecture News*, 5(7):105–117, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sam:2005:IMS

[SB05] Nana B. Sam and Martin Burtscher. Improving memory system performance with energy-efficient value speculation. *ACM SIGARCH Computer Architecture News*, 33 (4):121–127, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sharma:2011:BMS

[SBIS11] Navin Sharma, Sean Barker, David Irwin, and Prashant Shenoy. Blink: managing server clusters on intermittent power. *ACM SIGARCH Computer Architecture News*, 39(1):185–198, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sullivan:1977:LSHb

[SBK77] Herbert Sullivan, Theodore R. Bashkow, and David Klappholz. A large scale, homogeneous, fully distributed parallel machine, II. *ACM SIGARCH Computer Architecture News*, 5(7):118–124, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sahoo:2002:SHA

[SBM02] Ramendra K. Sahoo, Myung Bae, and Jose Moreira. Semi-hierarchical approach for reliability, availability, and serviceability of cellular systems. *ACM SIGARCH Computer Architecture News*, 30(3):9–10, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:2009:RTP

[SBM09] Karan Singh, Major Bhadauria, and Sally A. McKee. Real time power estimation and thread scheduling via performance counters. *ACM SIGARCH Computer Architecture News*, 37(2):46–55, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seshadri:2014:DBI

[SBM+14] Vivek Seshadri, Abhishek Bhowmick, Onur Mutlu, Phillip B. Gibbons, Michael A. Kozuch, and Todd C. Mowry. The dirty-block index. *ACM SIGARCH Computer Architecture News*, 42(3):157–168, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sani:2014:PDF

[SBQZ14] Ardalan Amiri Sani, Kevin Boos, Shaopu Qin, and Lin Zhong. I/O paravirtualization at the device file boundary. *ACM SIGARCH Computer Architecture News*, 42 (1):319–332, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Saidi:2009:EEP

[SBRM09] Ali G. Saidi, Nathan L. Binkert, Steven K. Reinhardt, and Trevor Mudge. End-to-end performance forecasting: finding bottlenecks before they happen. *ACM SIGARCH Computer Architecture News*, 37(3):361–370, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schupbach:2011:DLA

[SBRP11] Adrian Schüpbach, Andrew Baumann, Timothy Roscoe, and Simon Peter. A declarative language approach to device configuration. *ACM SIGARCH Computer Architecture News*, 39(1):119–132, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stenstrom:1993:ACC

[SBS93] Per Stenström, Mats Brorsson, and Lars Sandberg. An adaptive cache coherence protocol optimized for migratory sharing. *ACM SIGARCH Computer Architecture News*, 21(2):109–118, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sastry:2001:RPS

[SBS01] S. Subramanya Sastry, Rastislav Bodík, and James E. Smith. Rapid profiling via stratified sampling. *ACM SIGARCH Computer Architecture News*, 29(2):278–289, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saha:2013:IDP

[SBS13] Amrita Saha, Pijush Biswas, and Amitabha Sinha. An integrated development platform of a reconfigurable radio processor for software defined radio. *ACM SIGARCH Computer Architecture News*, 41 (2):30–35, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shahar:2016:ACS

[SBS16] Sagi Shahar, Shai Bergman, and Mark Silberstein. ActivePointers: a case for software address translation on GPUs. *ACM SIGARCH Computer Architecture News*, 44 (3):596–608, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shand:1991:HSL

[SBV91] M. Shand, P. Bertin, and J. Vuillemin. Hardware speedups in long integer multiplication. *ACM SIGARCH Computer Architecture News*, 19(1):106–113, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1995:MP

[SBV95] Gurindar S. Sohi, Scott E. Breach, and T. N. Vijaykumar. Multiscalar processors. *ACM SIGARCH Computer Architecture News*, 23(2):414–425, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1998:MP

[SBV98] Gurindar S. Sohi, Scott E. Breach, and T. N. Vijaykumar. Multiscalar processors. In ACM [ACM98a], pages 521–532. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Sengupta:2015:HSD

[SBZ+15] Aritra Sengupta, Swarnendu Biswas, Minjia Zhang, Michael D. Bond, and Milind Kulkarni. Hybrid static-dynamic analysis for statically bounded region serializability. *ACM SIGARCH Computer Architecture News*, 43(1):561–575, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Scherson:1989:DPC

[SC89] Isaac D. Scherson and Peter F. Corbett. Description and performance of a class of orthogonal multiprocessor networks. *ACM SIGARCH Computer Architecture News*, 17(6):80–90, December 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sarkar:1990:PPO

[SC90] Vivek Sarkar and David Cann. POSC—a partitioning and optimizing SISAL compiler. *ACM SIGARCH Computer Architecture News*, 18(3b): 148–164, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1992:OAF

[SC92] André Seznec and Karl Courtel. OPAC (abstract): a floating-point coprocessor dedicated to compute-bound kernels. *ACM SIGARCH Computer Architecture News*, 20(2):427, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sherwood:2001:ADF

[SC01] Timothy Sherwood and Brad Calder. Automated design of finite state machine predictors for customized processors. *ACM SIGARCH Computer Architecture News*, 29 (2):86–97, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sprangle:2002:IPP

[SC02] Eric Sprangle and Doug Carmean. Increasing processor performance by implementing deeper pipelines. *ACM SIGARCH Computer Architecture News*, 30(2):25–34, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suh:2005:DOC

[SC05] Hyo-Joong Suh and Sung Woo Chung. DRACO: optimized CC-NUMA system with novel dual-link interconnections to reduce the memory latency. *ACM SIGARCH Computer Architecture News*, 33(3):10–16, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sprangle:1997:APM

[SCAP97] Eric Sprangle, Robert S. Chappell, Mitch Alsup, and Yale N. Patt. The agree predictor: a mechanism for reducing negative branch history interference. *ACM SIGARCH Computer Architecture News*, 25(2):284–291, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sahoo:2013:ULI

[SCGA13] Swarup Kumar Sahoo, John Criswell, Chase Geigle, and Vikram Adve. Using likely invariants for automated software fault localization. *ACM SIGARCH Computer Architecture News*, 41(1):139–152, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Schaffner:1973:CAP

[Sch73a] Mario R. Schaffner. A computer architecture and its programming language. *ACM SIGARCH Computer Architecture News*, 2(4):271–277, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schank:1973:AAS

[Sch73b] Karl Schank. Architectural assistance to software debugging aids. *ACM SIGARCH Computer Architecture News*, 2(3): 37–38, October 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schneiker:1977:MF

[Sch77] Conrad Schneiker. The microprocessors of the future. *ACM SIGARCH Computer Architecture News*, 5(8):15–16, April 1977. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schalkoff:1983:TED

[Sch83] Robert J. Schalkoff. Towards an efficient, dedicated architecture for a Digital Geometric Image Transformer (DGIT). *ACM SIGARCH Computer Architecture News*, 11(4):23–29, September 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schachter:1988:BRH

[Sch88] Lorne H. Schachter. Book review of *High-Performance Computer Architecture* by Harold S. Stone. Addison-Wesley 1987. *ACM SIGARCH Computer Architecture News*, 16(3):81–84, June 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schwartz:1989:DDD

[Sch89] R. J. Schwartz. The design and development of a dynamic program behavior measurement tool for the Intel 8086/88. *ACM SIGARCH Computer Architecture News*, 17 (4):82–94, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schneck:1991:BRO

[Sch91a] Paul B. Schneck. Book review: *Optimizing FORTRAN Programs* by C. F. Schofield (Halstead Press, 1989). *ACM SIGARCH Computer Architecture News*, 19(1):153–154, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stephens:1991:ILP

[SCH+91b] Chriss Stephens, Bryce Cogswell, John Heinlein, Gregory Palmer, and John P. Shen. Instruction level profiling and evaluation of the IBM/6000. *ACM SIGARCH Computer Architecture News*, 19(3):180–189, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srinivasan:2001:LVC

[ScJLW01] Srikanth T. Srinivasan, Roy Dz ching Ju, Alvin R. Lebeck, and Chris Wilkerson. Locality vs. criticality. *ACM SIGARCH Computer Architecture News*, 29(2):132–143, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sudan:2010:MPI

[SCN+10] Kshitij Sudan, Niladrish Chatterjee, David Nellans, Manu Awasthi, Rajeev Balasubramonian, and Al Davis. Micro-pages: increasing DRAM efficiency with locality-aware data placement. *ACM SIGARCH Computer Architecture News*, 38(1):219–230, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sansonnet:1980:MLD

[SCP80] J. P. Sansonnet, M. Castan, and C. Percebois. M3L: a list-directed architecture. *ACM SIGARCH Computer Architecture News*, 8(3):105–112, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sansonnet:1982:DEL

[SCP+82] J. P. Sansonnet, M. Castan, C. Percebois, D. Botella, and J. Perez. Direct execution of Lisp on a list-directed architecture. *ACM SIGARCH Computer Architecture News*, 10(2):132–139, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shyam:2006:ULC

[SCP+06] Smitha Shyam, Kypros Constantinides, Sujay Phadke, Valeria Bertacco, and Todd Austin. Ultra low-cost defect protection for microprocessor pipelines. *ACM SIGARCH Computer Architecture News*, 34(5):73–82, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stucki:1978:CCA

[SCRT78] M. J. Stucki, J. R. Cox, G. C. Roman, and P. N. Turcu. Coordinating concurrent access in a distributed database architecture. *ACM SIGARCH Computer Architecture News*, 7(2):60–64, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sano:2014:FBC

[SCU+14] Kentaro Sano, Ryotaro Chiba, Tomoya Ueno, Hayato Suzuki, Ryo Ito, and Satoru Yamamoto. FPGA-based custom computing architecture for large-scale fluid simulation with building cube method. *ACM SIGARCH Computer Architecture News*, 42(4):45–50, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Steffan:2000:SAT

[SCZM00] J. Greggory Steffan, Christopher B. Colohan, Antonia Zhai, and Todd C. Mowry. A scalable approach to thread-level speculation. *ACM SIGARCH Computer Architecture News*, 28(2):1–12, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Scheurich:1987:CMO

[SD87] C. Scheurich and M. Dubois. Correct memory operation of cache-based multiprocessors. *ACM SIGARCH Computer Architecture News*, 15(2):234–243, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shin:1990:DAH

[SD90] Kang G. Shin and Greg Dykema. A distributed I/O architecture for HARTS. *ACM SIGARCH Computer Architecture News*, 18(3a): 332–342, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Su:1994:BMS

[SD94] C.-L Su and A. M. Despain. Branch with masked squashing in superpipelined processors. *ACM SIGARCH Computer Architecture News*, 22(2):130–140, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shin:1995:AIH

[SD95] Kang G. Shin and Stuart W. Daniel. Analysis and implementation of hybrid switching. *ACM SIGARCH Computer Architecture News*, 23(2):211–219, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suh:2009:DMR

[SD09] Jinho Suh and Michel Dubois. Dynamic MIPS rate stabilization in out-of-order processors. *ACM SIGARCH Computer Architecture News*, 37 (3):46–56, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shriraman:2010:SLW

[SD10] Arrvindh Shriraman and Sandhya Dwarkadas. Sentry: light-weight auxiliary memory access control. *ACM SIGARCH Computer Architecture News*, 38(3):407–418, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Subramaniyan:2017:PAP

[SD17] Arun Subramaniyan and Reetuparna Das. Parallel automata processor. *ACM SIGARCH Computer Architecture News*, 45(2):600–612, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sridharan:2015:MEM

[SDB+15] Vilas Sridharan, Nathan DeBardeleben, Sean Blanchard, Kurt B. Ferreira, Jon Stearley, John Shalf, and Sudhanva Gurumurthi. Memory errors in modern systems: The good, the bad, and the ugly. *ACM SIGARCH Computer Architecture News*, 43 (1):297–310, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shaw:2007:ASP

[SDD+07] David E. Shaw, Martin M. Deneroff, Ron O. Dror, Jeffrey S. Kuskin, Richard H. Larson, John K. Salmon, Cliff Young, Brannon Batson, Kevin J. Bowers, Jack C.

Chao, Michael P. Eastwood, Joseph Gagliardo, J. P. Grossman, C. Richard Ho, Douglas J. Ierardi, István Kolossváry, John L. Klepeis, Timothy Layman, Christine McLeavey, Mark A. Moraes, Rolf Mueller, Edward C. Priest, Yibing Shan, Jochen Spengler, Michael Theobald, Brian Towles, and Stanley C. Wang. Anton, a special-purpose machine for molecular dynamics simulation. *ACM SIGARCH Computer Architecture News*, 35(2):1–12, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:2003:GLB

[SDGT03] Arjun Singh, William J. Dally, Amit K. Gupta, and Brian Towles. GOAL: a load-balanced adaptive routing algorithm for torus networks. *ACM SIGARCH Computer Architecture News*, 31(2):194–205, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schulte:2014:PCS

[SDH+14] Eric Schulte, Jonathan Dorn, Stephen Harding, Stephanie Forrest, and Westley Weimer. Post-compiler software optimization for reducing energy. *ACM SIGARCH Computer Architecture News*, 42(1):639–652, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sidiroglou-Douskos:2015:TAI

[SDLR+15] Stelios Sidiroglou-Douskos, Eric Lahtinen, Nathan Rittenhouse, Paolo Piselli, Fan Long, Deokhwan Kim, and Martin Rinard. Targeted automatic integer overflow discovery using goal-directed conditional branch enforcement. *ACM SIGARCH Computer Architecture News*, 43(1):473–486, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sohi:1985:ELE

[SDP85] Gurindar S. Sohi, Edward S. Davidson, and Janak H. Patel. An efficient LISP-execution architecture with a new representation for list structures. *ACM SIGARCH Computer Architecture News*, 13(3):91–98, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sudhakrishnan:2011:REB

[SDR11] Sangeetha Sudhakrishnan, Rigo Dicochea, and Jose Renau. Releasing efficient beta cores to market early. *ACM SIGARCH Computer Architecture News*, 39(3):213–222, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Saulsbury:2000:RBT

[SDS00] Ashley Saulsbury, Fredrik Dahlgren, and Per Stenström. Recency-based TLB preloading. *ACM SIGARCH Computer Architecture News*, 28(2):117–127, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shriraman:2008:FDT

[SDS08] Arrvindh Shriraman, Sandhya Dwarkadas, and Michael L. Scott. Flexible decoupled transactional memory support. *ACM SIGARCH Computer Architecture News*, 36(3):139–150, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1987:ZCP

[SDV+87] J. E. Smith, G. E. Dermer, B. D. Vanderwarn, S. D. Klinger, and C. M. Rozewski. The ZS-1 central processor. *ACM SIGARCH Computer Architecture News*, 15(5):199–204, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schulte:2013:ARB

[SDWF13] Eric Schulte, Jonathan DiLorenzo, Westley Weimer, and Stephanie Forrest. Automated repair of binary and assembly programs for cooperating embedded devices. *ACM SIGARCH Computer Architecture News*, 41 (1):317–328, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Staudhammer:1974:FDO

[SEE74] John Staudhammer, Jeffrey F. Eastman, and James N. England. A fast display-oriented processor. *ACM SIGARCH Computer Architecture News*, 3(4):17–22, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seebauer:1989:MCEa

[See89a] H. Seebauer. A memory controller executing segment operations in time $O(1)$. *ACM SIGARCH Computer Architecture News*, 17(4):74–81, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seebauer:1989:MCEb

[See89b] H. Seebauer. A memory controller executing segment operations in time $O(1)$. *ACM SIGARCH Computer Architecture News*, 17(5):95–102, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Simone:1995:ITO

[SEI+95] M. Simone, A. Essen, A. Ike, A. Krishnamoorthy, T. Maruyama, N. Patkar, M. Ramaswami, M. Shebanow, V. Thirumalaiswamy, and D. Tovey. Implementation trade-offs in using a restricted data flow architecture in a high performance RISC microprocessor. *ACM SIGARCH Computer Architecture News*, 23(2):151–162, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1986:ERC

[Sez86] A. Seznec. An efficient routing control for the SIGMA network $\Sigma(4)$. *ACM SIGARCH Computer Architecture News*, 14(2):158–168, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1993:CTW

[Sez93] André Seznec. A case for two-way skewed-associative caches. *ACM SIGARCH Computer Architecture News*, 21(2):169–178, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1994:DSC

[Sez94] A. Seznec. Decoupled sectored caches: conciliating low tag implementation cost. *ACM SIGARCH Computer Architecture News*, 22(2):384–393, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1996:DUP

[Sez96] André Seznec. Don't use the page number, but a pointer to it. *ACM SIGARCH Computer Architecture News*, 24(2):104–113, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:2005:AGH

[Sez05] Andre Seznec. Analysis of the O-GEometric History Length branch predictor. *ACM SIGARCH Computer Architecture News*, 33(2):394–405, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1991:HBD

[SF91] Gurindar S. Sohi and Manoj Franklin. High-bandwidth data memory systems for superscalar processors. *ACM SIGARCH Computer Architecture News*, 19(2):53–62, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:2003:EAP

[SF03] André Seznec and Antony Fraboulet. Effective ahead pipelining of instruction block address generation. *ACM SIGARCH Computer Architecture News*, 31(2):241–252, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:2002:DTA

[SFKS02] André Seznec, Stephen Felix, Venkata Krishnan, and Yiannakis Sazeides. Design tradeoffs for the Alpha EV8 conditional branch predictor. *ACM*

SIGARCH Computer Architecture News, 30(2):295–306, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Silberstein:2013:GIF

[SFKW13] Mark Silberstein, Bryan Ford, Idit Keidar, and Emmett Witchel. GPUfs: integrating a file system with GPUs. *ACM SIGARCH Computer Architecture News*, 41(1):485–498, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shen:2017:MCA

[SFM17] Yongming Shen, Michael Ferdman, and Peter Milder. Maximizing CNN accelerator efficiency through resource partitioning. *ACM SIGARCH Computer Architecture News*, 45(2):535–547, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Smith:2000:VIS

[SFS00] J. E. Smith, Greg Faanes, and Rabin Sugumar. Vector instruction set support for conditional operations. *ACM SIGARCH Computer Architecture News*, 28(2):260–269, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sakanaka:2004:LER

[SFS04] Akihito Sakanaka, Seiichirou Fujii, and Toshinori Sato. A leakage-energy-reduction technique for highly-associative caches in embedded systems. *ACM SIGARCH Computer Architecture News*, 32(3):50–54, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saito:2004:FBD

[SFV+04] Yasushi Saito, Svend Frølund, Alistair Veitch, Arif Merchant, and Susan Spence. FAB: building distributed enterprise disk arrays from commodity components. *ACM SIGARCH Computer Architecture News*, 32(5):48–58, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1983:SIC

[SG83] James E. Smith and James R. Goodman. A study of instruction cache organizations and replacement policies. *ACM SIGARCH Computer Architecture News*, 11(3):132–137, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singhal:1994:ASP

[SG94] A. Singhal and A. J. Goldberg. Architectural support for performance tuning: a case study on the SPARCcenter 2000. *ACM SIGARCH Computer*

Architecture News, 22(2):48–59, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stricker:1995:OMS

[SG95] T. Stricker and T. Gross. Optimizing memory system performance for communication in parallel computers. *ACM SIGARCH Computer Architecture News*, 23(2):308–319, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sadler:2000:APE

[SGB00] Chris Sadler, Sandeep K. S. Gupta, and Rohit Bhatia. Applying predication to efficiently handle runtime class testing. *ACM SIGARCH Computer Architecture News*, 28(1):34–42, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sampson:2005:FSC

[SGC+05] Jack Sampson, Rubén González, Jean-François Collard, Norman P. Jouppi, and Mike Schlansker. Fast synchronization for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 33(4):64–69, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schwetman:1985:CPP

[SGG+85] Herb Schwetman, Daniel Gajski, Dennis Gannon, Daniel Hills, Jacob Schwartz, and James Browne. Classification of parallel processor architectures (invited tutorial session). *ACM SIGARCH Computer Architecture News*, 13(3):45, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stodolsky:1993:PLO

[SGH93] Daniel Stodolsky, Garth Gibson, and Mark Holland. Parity logging overcoming the small write problem in redundant disk arrays. *ACM SIGARCH Computer Architecture News*, 21(2):64–75, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Santhanam:1997:DPH

[SGH97] Vatsa Santhanam, Edward H. Gornish, and Wei-Chung Hsu. Data prefetching on the HP PA-8000. *ACM SIGARCH Computer Architecture News*, 25(2):264–273, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smolens:2004:FBS

[SGK+04] Jared C. Smolens, Brian T. Gold, Jangwoo Kim, Babak Falsafi, James C. Hoe, and Andreas G. Nowatzyk. Fingerprinting: bounding soft-error detection latency and bandwidth. *ACM SIGARCH Computer Architecture News*, 32 (5):224–234, December 2004.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stewart:2015:ZDW

[SGM+15] Gordon Stewart, Mahanth Gowda, Geoffrey Mainland, Bozidar Radunovic, Dimitrios Vytiniotis, and Cristina Luengo Agullo. Ziria: a DSL for wireless systems programming. *ACM SIGARCH Computer Architecture News*, 43 (1):415–428, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Schlosser:2000:DCS

[SGNG00] Steven W. Schlosser, John Linwood Griffin, David F. Nagle, and Gregory R. Ganger. Designing computer systems with MEMS-based storage. *ACM SIGARCH Computer Architecture News*, 28(5):1–12, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Spertus:1993:EMF

[SGS+93] Ellen Spertus, Seth Copen Goldstein, Klaus Erik Schauser, Thorsten von Eicken, David E. Culler, and William J. Dally. Evaluation of mechanisms for fine-grained parallel programs in the J-machine and the CM-5. *ACM SIGARCH Computer Architecture News*, 21(2):302–313, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sankar:2008:IDP

[SGS08] Sriram Sankar, Sudhanva Gurumurthi, and Mircea R. Stan. Intra-disk parallelism: An idea whose time has come. *ACM SIGARCH Computer Architecture News*, 36(3):303–314, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singha:2011:NAF

[SGS11] Satrughna Singha, Aniruddha Ghosh, and Amitabha Sinha. A new architecture for FPGA based implementation of conversion of binary to double base number system (DBNS) using parallel search technique. *ACM SIGARCH Computer Architecture News*, 39(5):12–18, December 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Scott:1992:PSR

[SGV92] Steven L. Scott, James R. Goodman, and Mary K. Vernon. Performance of the SCI ring. *ACM SIGARCH Computer Architecture News*, 20(2):403–414, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shen:1980:FTC

[SH80] John P. Shen and John P. Hayes. Fault tolerance of a class of connecting networks. *ACM SIGARCH Computer Architecture News*, 8

(3):61–71, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Steenkiste:1987:TTC

[SH87] Peter Steenkiste and John Hennessy. Tags and type checking in LISP: hardware and software approaches. *ACM SIGARCH Computer Architecture News*, 15(5):50–59, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Simoni:1991:MPL

[SH91] Richard Simoni and Mark Horowitz. Modeling the performance of limited pointers directories for cache coherence. *ACM SIGARCH Computer Architecture News*, 19(3):309–319, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Siegle:1992:MPB

[SH92] Markus Siegle and Richard Hofmann. Monitoring program behaviour on SUPRENUM. *ACM SIGARCH Computer Architecture News*, 20(2):332–341, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shirase:2005:AEC

[SH05] Masaaki Shirase and Yasushi Hibino. An architecture for elliptic curve cryptography computation. *ACM SIGARCH Computer Architecture News*, 33(1):124–133, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sharp:1980:STD

[Sha80] John A. Sharp. Some thoughts on data flow architectures. *ACM SIGARCH Computer Architecture News*, 8(4):11–21, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sasanka:2002:JLG

[SHA02] Ruchira Sasanka, Christopher J. Hughes, and Sarita V. Adve. Joint local and global hardware adaptations for energy. *ACM SIGARCH Computer Architecture News*, 30 (5):144–155, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sembrant:2014:DDD

[SHBS14] Andreas Sembrant, Erik Hagersten, and David Black-Schaffer. The Direct-to-Data (D2D) cache: navigating the cache hierarchy with a single lookup. *ACM SIGARCH Computer Architecture News*, 42(3):133–144, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shen:2010:RBV

[She10] Kai Shen. Request behavior variations. *ACM SIGARCH*

Computer Architecture News, 38(1):103–116, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shimizu:1992:LLM

[SHI92] Toshiyuki Shimizu, Takeshi Horie, and Hiroaki Ishihata. Low-latency message communication support for the AP1000. *ACM SIGARCH Computer Architecture News*, 20(2):288–297, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sun:2011:MME

[SHK+11] Guangyu Sun, Christopher J. Hughes, Changkyu Kim, Jishen Zhao, Cong Xu, Yuan Xie, and Yen-Kuang Chen. Moguls: a model to explore the memory hierarchy for bandwidth improvements. *ACM SIGARCH Computer Architecture News*, 39 (3):377–388, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Steenkiste:1994:AEH

[SHMZ94] P. Steenkiste, M. Hemy, T. Mummert, and B. Zill. Architecture and evaluation of a high-speed networking subsystem for distributed-memory systems. *ACM SIGARCH Computer Architecture News*, 22(2):154–163, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shimada:1986:EPD

[SHNS86] T. Shimada, K. Hiraki, K. Nishida, and S. Sekiguchi. Evaluation of a prototype data flow processor of the SIGMA-1 for scientific computations. *ACM SIGARCH Computer Architecture News*, 14(2):226–234, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shore:1974:CCa

[Sho74a] John Shore. Conjecture corner. *ACM SIGARCH Computer Architecture News*, 3(1): 3–6, March 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shore:1974:CCb

[Sho74b] John Shore. Conjecture corner. *ACM SIGARCH Computer Architecture News*, 3(3): 4–9, September 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Short:1987:UIS

[Sho87] Brian Short. Use of instruction set simulators to evaluate the LOW RISC. *ACM SIGARCH Computer Architecture News*, 15(1):63–67, March 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shalev:2016:CCS

[SHP+16] Noam Shalev, Eran Harpaz, Hagar Porat, Idit Keidar, and Yaron Weinsberg. CSR: Core surprise removal in commodity operating systems. *ACM SIGARCH Computer Architecture News*, 44(2):773–787, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Soundararajan:1998:FUM

[SHV+98] Vijayaraghavan Soundararajan, Mark Heinrich, Ben Verghese, Kourosh Gharachorloo, Anoop Gupta, and John Hennessy. Flexible use of memory for replication/ migration in cache-coherent DSM multiprocessors. *ACM SIGARCH Computer Architecture News*, 26(3):342–355, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Syed:2012:LOA

[SHV12] Rizwan Syed, Yajun Ha, and Bharadwaj Veeravalli. A low overhead abstract architecture for FPGA resource management. *ACM SIGARCH Computer Architecture News*, 40(5):28–33, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Shi:1997:IID

[SHZ97] Weisong Shi, Weiwu Hu, and Ming Zhu. An innovative implementation for directory-based cache coherence in shared memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 25(5):2–9, December 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sibai:2007:PAW

[Sib07] Fadi N. Sibai. Performance analysis and workload characterization of the 3DMark05 benchmark on modern parallel computer platforms. *ACM SIGARCH Computer Architecture News*, 35(3):44–52, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Siegel:1977:UVT

[Sie77] Howard Jay Siegel. The universality of various types of SIMD machine interconnection networks. *ACM SIGARCH Computer Architecture News*, 5(7):70–79, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sato:1989:RTC

[SIG89] M. Sato, S. Ichikawa, and E. Goto. Run-time checking in Lisp by integrating memory addressing and range checking. *ACM SIGARCH Computer Architecture News*, 17(3):290–297, June 1989. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Singh:1992:AGP

[Sin92a] Gautam B. Singh. Architecture of a graphics processor (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):429, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:1992:IHB

[Sin92b] Jaswinder Pal Singh. Implications of hierarchical N-body methods for multiprocessor architecture. *ACM SIGARCH Computer Architecture News*, 20(2):436, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sites:1973:FPS

[Sit73] Richard L. Sites. Floating point significance interrupt proposal. *ACM SIGARCH Computer Architecture News*, 2(1):10–12, January 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sapiecha:1986:MAH

[SJ86] K. Sapiecha and R. Jarocki. Modular architecture for high performance implementation of FFT algorithm. *ACM SIGARCH Computer Architecture News*, 14(2):261–270, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1988:SPT

[SJ88] A. Seznec and Y. Jégou. Synchronizing processors through memory requests in a tightly coupled multiprocessor. *ACM SIGARCH Computer Architecture News*, 16(2):393–400, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

SanMiguel:2016:AA

[SJ16] Joshua San Miguel and Natalie Enright Jerger. The anytime automaton. *ACM SIGARCH Computer Architecture News*, 44(3):545–557, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Subramanian:2017:FEM

[SJA+17] Suvinay Subramanian, Mark C. Jeffrey, Maleen Abeydeera, Hyun Ryong Lee, Victor A. Ying, Joel Emer, and Daniel Sanchez. Fractal: an execution model for fine-grain nested speculative parallelism. *ACM SIGARCH Computer Architecture News*, 45(2):587–599, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Stenstrom:1992:CPE

[SJG92] Per Stenström, Truman Joe, and Anoop Gupta. Comparative performance evaluation of cache-coherent NUMA and

COMA architectures. *ACM SIGARCH Computer Architecture News*, 20(2):80–91, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1989:LMI

[SJH89] M. D. Smith, M. Johnson, and M. A. Horowitz. Limits on multiple instruction issue. *ACM SIGARCH Computer Architecture News*, 17(2):290–302, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Samadi:2014:PPB

[SJLM14] Mehrzad Samadi, Davoud Anoushe Jamshidi, Janghaeng Lee, and Scott Mahlke. Paraprox: pattern-based approximation for data parallel applications. *ACM SIGARCH Computer Architecture News*, 42(1):35–50, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Schmittgen:1983:SAC

[SK83] Claudia Schmittgen and Werner Kluge. A system architecture for the concurrent evaluation of applicative program expressions. *ACM SIGARCH Computer Architecture News*, 11(3):356–362, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sanguinetti:1985:PMB

[SK85] J. Sanguinetti and B. Kumar. Performance of a message-based multiprocessor. *ACM SIGARCH Computer Architecture News*, 13(3):424–425, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sargeant:1986:SDS

[SK86] J. Sargeant and C. C. Kirkham. Stored data structures on the Manchester dataflow machine. *ACM SIGARCH Computer Architecture News*, 14(2):235–242, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shimizu:2004:JOL

[SK04] Naohiko Shimizu and Chiaki Kon. Java object look aside buffer for embedded applications. *ACM SIGARCH Computer Architecture News*, 32(3):43–49, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sridharan:2010:UHV

[SK10] Vilas Sridharan and David R. Kaeli. Using hardware vulnerability factors to enhance AVF analysis. *ACM SIGARCH Computer Architecture News*, 38(3):461–472, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sanchez:2011:VSE

[SK11] Daniel Sanchez and Christos Kozyrakis. Vantage: scalable and efficient fine-grain cache partitioning. *ACM SIGARCH Computer Architecture News*, 39(3):57–68, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sanchez:2013:ZFA

[SK13] Daniel Sanchez and Christos Kozyrakis. ZSim: fast and accurate microarchitectural simulation of thousand-core systems. *ACM SIGARCH Computer Architecture News*, 41 (3):475–486, June 2013. ICSA '13 conference proceedings.

Sung:2001:MDA

[SKA01] Michael Sung, Ronny Krashinsky, and Krste Asanović. Multithreading decoupled architectures for complexity-effective general purpose computing. *ACM SIGARCH Computer Architecture News*, 29(5):56–61, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sawada:2011:PCW

[SKA+11] Hiroomi Sawada, Morihiro Kuga, Motoki Amagasaki, Masahiro Iida, and Toshinori Sueyoshi. Parallelization of the channel width search for FPGA routing. *ACM SIGARCH Computer Architecture News*, 39(4):82–85, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sung:2013:DEH

[SKA13] Hyojin Sung, Rakesh Komuravelli, and Sarita V. Adve. DeNovoND: efficient hardware support for disciplined non-determinism. *ACM SIGARCH Computer Architecture News*, 41(1): 13–26, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sharma:2009:RPL

[SKB09] Sandeep Sharma, K. S. Kahlon, and P. K. Bansal. Reliability and path length analysis of irregular fault tolerant multistage interconnection network. *ACM SIGARCH Computer Architecture News*, 37(5):16–23, December 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seo:2017:FAS

[SKB+17] Jihye Seo, Wook-Hee Kim, Woongki Baek, Beomseok Nam, and Sam H. Noh. Failure-atomic slotted paging for persistent memory. *ACM SIGARCH Computer Architecture News*, 45(1):91–104, March 2017. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Suh:2003:PAP

[SKC+03] Jinwoo Suh, Eun-Gyu Kim, Stephen P. Crago, Lakshmi Srinivasan, and Matthew C. French. A performance analysis of PIM, stream processing, and tiled processing on memory-intensive signal processing kernels. *ACM SIGARCH Computer Architecture News*, 31(2):410–421, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Satish:2012:CTP

[SKC+12] Nadathur Satish, Changkyu Kim, Jatin Chhugani, Hideki Saito, Rakesh Krishnaiyer, Mikhail Smelyanskiy, Milind Girkar, and Pradeep Dubey. Can traditional programming bridge the Ninja performance gap for parallel computing applications? *ACM SIGARCH Computer Architecture News*, 40(3):440–451, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Sassa:2016:FSP

[SKCY16] Shohei Sassa, Kenji Kanazawa, Shaowei Cai, and Moritoshi Yasunaga. An FPGA solver for partial MaxSAT problems based on stochastic local search. *ACM SIGARCH Computer Architecture News*, 44(4):32–37, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Stuecheli:2010:VWQ

[SKD+10] Jeffrey Stuecheli, Dimitris Kaseridis, David Daly, Hillery C. Hunter, and Lizy K. John. The virtual write queue: coordinating DRAM and last-level cache policies. *ACM SIGARCH Computer Architecture News*, 38(3):72–82, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srikantaiah:2008:ASP

[SKI08] Shekhar Srikantaiah, Mahmut Kandemir, and Mary Jane Irwin. Adaptive set pinning: managing shared caches in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 36(1):135–144, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Song:2017:HBA

[SKJ+17] Wonjun Song, Gwangsun Kim, Hyungjoon Jung, Jongwook Chung, Jung Ho Ahn, Jae W. Lee, and John Kim. History-based arbitration for fairness in processor-interconnect of NUMA servers. *ACM SIGARCH Computer Architecture News*, 45(1):765–777, March 2017. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Sklenar:1992:PUVb

[Skl92a] Ivan Sklenář. Prefetch unit for vector operations on scalar computers. *ACM SIGARCH Computer Architecture News*, 20(4):31–37, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sklenar:1992:PUVa

[Skl92b] Ivan Sklenar. Prefetch unit for vector operations on scalar computers (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):430, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sano:2015:SCS

[SKN+15] Kentaro Sano, Fumiya Kono, Naohito Nakasato, Alexander Vazhenin, and Stanislav Sedukhin. Stream computation of shallow water equation solver for FPGA-based 1D tsunami simulation. *ACM SIGARCH Computer Architecture News*, 43(4):82–87, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sprunt:1988:PDP

[SKS88] B. Sprunt, D. Kirk, and L. Sha. Priority-driven, preemptive I/O controllers for real-time systems. *ACM SIGARCH Computer Architecture News*, 16(2):152–159, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sato:1992:TBP

[SKS+92] Mitsuhisa Sato, Yuetsu Kodama, Shuichi Sakai, Yoshinori Yamaguchi, and Yasuhito Koumura. Thread-based programming for the EM-4 hybrid dataflow machine. *ACM SIGARCH Computer Architecture News*, 20(2):146–155, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sano:2013:ECC

[SKS+13] Kentaro Sano, Yoshiaki Kono, Hayato Suzuki, Ryotaro Chiba, Ryo Ito, Tomohiro Ueno, Kyo Koizumi, and Satoru Yamamoto. Efficient custom computing of fully-streamed lattice Boltzmann method on tightly-coupled FPGA cluster. *ACM SIGARCH Computer Architecture News*, 41(5):47–52, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Short:1988:SST

[SL88] R. T. Short and H. M. Levy. A simulation study of two-level caches. *ACM SIGARCH Computer Architecture News*, 16(2):81–88, May 1988. CODEN CANED2.

ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1992:IPS

[SL92] André Seznec and Jacques Lenfant. Interleaved parallel schemes: improving memory throughput on supercomputers. *ACM SIGARCH Computer Architecture News*, 20(2):246–255, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seznec:1993:OMS

[SL93] André Seznec and Jacques Lenfant. Odd memory systems may be quite interesting. *ACM SIGARCH Computer Architecture News*, 21(2):341–350, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srinivasan:2005:MMC

[SL05] Ram Srinivasan and Olaf Lubeck. MonteSim: a Monte Carlo performance model for in-order microarchitectures. *ACM SIGARCH Computer Architecture News*, 33(5):75–80, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Szefer:2012:ASH

[SL12] Jakub Szefer and Ruby B. Lee. Architectural support for hypervisor-secure virtualization. *ACM SIGARCH Computer Architecture News*, 40(1):437–450, March 2012. ASPLOS '12 conference proceedings.

Simha:2012:UAS

[SLcC12] Dilip Nijagal Simha, Maohua Lu, and Tzi cker Chiueh. An update-aware storage system for low-locality update-intensive workloads. *ACM SIGARCH Computer Architecture News*, 40(1):375–386, March 2012. ASPLOS '12 conference proceedings.

Shi:2006:IFD

[SLFG06] Weidong Shi, Hsien-Hsin S. Lee, Laura 'Falk, and Mrinmoy Ghosh. An integrated framework for dependable and revivable architectures using multicore processors. *ACM SIGARCH Computer Architecture News*, 34(2):102–113, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sui:2016:PCA

[SLFP16] Xin Sui, Andrew Lenharth, Donald S. Fussell, and Keshav Pingali. Proactive control of approximate programs. *ACM SIGARCH Computer Architecture News*, 44(2):607–621, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shi:2005:HEC

[SLG+05] Weidong Shi, Hsien-Hsin S. Lee, Mrinmoy Ghosh, Chenghuai Lu, and Alexandra Boldyreva. High efficiency counter mode security architecture via prediction and precomputation. *ACM SIGARCH Computer Architecture News*, 33(2):14–24, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1990:BBS

[SLH90] Michael D. Smith, Monica S. Lam, and Mark A. Horowitz. Boosting beyond static scheduling in a superscalar processor. *ACM SIGARCH Computer Architecture News*, 18(3a):344–354, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sidiroglou:2005:HSS

[SLK05] Stelios Sidiroglou, Michael E. Locasto, and Angelos D. Keromytis. Hardware support for self-healing software services. *ACM SIGARCH Computer Architecture News*, 33(1):42–47, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shi:2005:TIA

[SLLG05] Weidong Shi, Hsien-Hsin S. Lee, Chenghuai Lu, and Mrinmoy Ghosh. Towards the issues in architectural support for protection of software execution. *ACM SIGARCH Computer Architecture News*, 33 (1):6–15, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sechrest:1996:CAD

[SLM96] Stuart Sechrest, Chih-Chieh Lee, and Trevor Mudge. Correlation and aliasing in dynamic branch predictors. *ACM SIGARCH Computer Architecture News*, 24(2):22–32, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sloan:1973:CAC

[Slo73] M. E. Sloan. Computer architecture courses in electrical engineering departments. *ACM SIGARCH Computer Architecture News*, 2(4):191–195, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sloan:1974:DOC

[Slo74] M. E. Sloan. A design-oriented computer engineering program. *ACM SIGARCH Computer Architecture News*, 3(4):220–224, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sidiroglou:2009:AAS

[SLP+09] Stelios Sidiroglou, Oren Laadan, Carlos Perez, Nicolas Viennot, Jason Nieh, and Angelos D. Keromytis. ASSURE: automatic software self-healing using rescue points. *ACM SIGARCH Computer Architecture News*, 37(1):37–

48, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sim:2012:FBC

[SLQK12] Jaewoong Sim, Jaekyu Lee, Moinuddin K. Qureshi, and Hyesoon Kim. FLEXclusion: balancing cache capacity and on-chip bandwidth via flexible exclusion. *ACM SIGARCH Computer Architecture News*, 40(3):321–332, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Schechter:2010:UEE

[SLSB10] Stuart Schechter, Gabriel H. Loh, Karin Straus, and Doug Burger. Use ECP, not ECC, for hard failures in resistive memories. *ACM SIGARCH Computer Architecture News*, 38(3):141–152, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Swaminathan:2014:EAS

[SLSN14] Karthik Swaminathan, Huichu Liu, Jack Sampson, and Vijaykrishnan Narayanan. An examination of the architecture and system-level tradeoffs of employing steep slope devices in 3D CMPs. *ACM SIGARCH Computer Architecture News*, 42(3):241–252, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sim:2013:RSD

[SLSO13] Jaewoong Sim, Gabriel H. Loh, Vilas Sridharan, and Mike O'Connor. Resilient die-stacked DRAM caches. *ACM SIGARCH Computer Architecture News*, 41(3):416–427, June 2013. ICSA '13 conference proceedings.

Solihin:2002:UUL

[SLT02] Yan Solihin, Jaejin Lee, and Josep Torrellas. Using a user-level memory thread for correlation prefetching. *ACM SIGARCH Computer Architecture News*, 30(2):171–182, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Solar-Lezama:2006:CSF

[SLTB+06] Armando Solar-Lezama, Liviu Tancau, Rastislav Bodik, Sanjit Seshia, and Vijay Saraswat. Combinatorial sketching for finite programs. *ACM SIGARCH Computer Architecture News*, 34(5):404–415, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Su:2016:NNB

[SLTC16] Jiang Su, Jianxiong Liu, David B. Thomas, and Peter Y. K. Cheung. Neural network based reinforcement learning acceleration on FPGA platforms. *ACM SIGARCH Com-*

puter Architecture News, 44 (4):68–73, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Suh:2004:SPE

[SLZD04] G. Edward Suh, Jae W. Lee, David Zhang, and Srinivas Devadas. Secure program execution via dynamic information flow tracking. *ACM SIGARCH Computer Architecture News*, 32(5):85–96, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schulthess:1977:RCA

[SM77] Peter U. Schulthess and Eduard P. Mumprecht. Reply to the case against stack-oriented instruction sets. *ACM SIGARCH Computer Architecture News*, 6(5):24–27, December 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1989:MRT

[SM89] J. M. Smith and G. Q. Maguire, Jr. Measured response times for page-sized fetches on a network. *ACM SIGARCH Computer Architecture News*, 17(5):48–54, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saha:1994:DDT

[SM94] Avijit Saha and Nadeem Malik. Distributed directory tags. *ACM SIGARCH Computer Architecture News*, 22(5):27–29, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shun:2012:FAC

[SM12] Zheng Zhi Shun and Tsutomu Maruyama. FPGA acceleration of CDO pricing based on correlation expansions. *ACM SIGARCH Computer Architecture News*, 40(5):40–45, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Sen:2014:TLT

[SM14] Soumik Sen and Subhashis Maitra. Three levels three dimensional compact coding. *ACM SIGARCH Computer Architecture News*, 42 (2):9–14, May 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sabeghi:2010:RMS

[SMB10] Mojtaba Sabeghi, Hamid Mushtaq, and Koen Bertels. Runtime multitasking support on polymorphic platforms. *ACM SIGARCH Computer Architecture News*, 38(4):46–52, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saha:2013:PAF

[SMD+13] Amrita Saha, Manideepa Mukherjee, Debanjana Datta, Sangita Saha, and Amitabha Sinha. Performance analysis of a FPGA based novel binary and DBNS multiplier. *ACM SIGARCH Computer Architecture News*, 41(2):9–16, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sorin:2002:SIA

[SMHW02] Daniel J. Sorin, Milo M. K. Martin, Mark D. Hill, and David A. Wood. SafetyNet: improving the availability of shared memory multiprocessors with global checkpoint/recovery. *ACM SIGARCH Computer Architecture News*, 30(2):123–134, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1975:ACFa

[Smi75a] W. R. Smith. AADC computer family architecture program. *ACM SIGARCH Computer Architecture News*, 4(1): 4–8, March 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1975:ACFb

[Smi75b] William R. Smith. AADC computer family architecture questions and answers. *ACM SIGARCH Computer Architecture News*, 4(3):15–21, September 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1982:DAE

[Smi82] James E. Smith. Decoupled access/execute computer architectures. *ACM SIGARCH Computer Architecture News*, 10(3):112–119, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1985:CEI

[Smi85] Alan Jay Smith. Cache evaluation and the impact of workload choice. *ACM SIGARCH Computer Architecture News*, 13(3):64–73, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1986:BRC

[Smi86] Alan Jay Smith. Bibliography and reading on CPU cache memories and related topics. *ACM SIGARCH Computer Architecture News*, 14(1):22–42, January 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1990:EA

[Smi90] Burton Smith. The end of architecture. *ACM SIGARCH Computer Architecture News*, 18(4):10–17, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1991:SBC

[Smi91] Alan Jay Smith. Second bibliography on Cache memories. *ACM SIGARCH Computer Architecture News*, 19(4):154–182, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1998:DAE

[Smi98a] James E. Smith. Decoupled access/execute computer architectures. In ACM [ACM98a], pages 231–238. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:1998:RSB

[Smi98b] James E. Smith. Retrospective: a study of branch prediction strategies. In ACM [ACM98a], pages 22–23. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:1998:RDA

[Smi98c] James E. Smith. Retrospective: Decoupled access/execute architectures. In ACM [ACM98a], pages 27–28. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:1998:RIP

[Smi98d] James E. Smith. Retrospective: Implementing precise interrupts in pipelined processors. In ACM [ACM98a], page 42. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:1998:SBP

[Smi98e] James E. Smith. A study of branch prediction strategies. In ACM [ACM98a], pages 202–215. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358;

http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:2014:EDN

[Smi14] James E. Smith. Efficient digital neurons for large scale cortical architectures. *ACM SIGARCH Computer Architecture News*, 42(3): 229–240, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Suleman:2010:DMM

[SMJ+10] M. Aater Suleman, Onur Mutlu, José A. Joao, Khubaib, and Yale N. Patt. Data marshaling for multi-core architectures. *ACM SIGARCH Computer Architecture News*, 38(3):441–450, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:2011:EPS

[SMN+11] Abhayendra Singh, Daniel Marino, Satish Narayanasamy, Todd Millstein, and Madan Musuvathi. Efficient processor support for DRFx, a memory model with exceptions. *ACM SIGARCH Computer Architecture News*, 39(1):53–66, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smotherman:1989:SBT

[Smo89] M. Smotherman. A sequencing-based taxonomy of I/O systems and review of historical machines. *ACM SIGARCH Computer Architecture News*, 17(5):5–15, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suleman:2009:ACS

[SMQP09] M. Aater Suleman, Onur Mutlu, Moinuddin K. Qureshi, and Yale N. Patt. Accelerating critical section execution with asymmetric multi-core architectures. *ACM SIGARCH Computer Architecture News*, 37(1):253–264, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Stone:1985:FGC

[SMRT85] Harold Stone, Eric Manning, Harriet Rigas, and Philip Treleaven. The fifth generation computer systems projects (invited session). *ACM SIGARCH Computer Architecture News*, 13(3):247, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Severson:1995:TCP

[SN95] Aimee Severson and Brent Nelson. Throughput in a counterflow pipeline processor. *ACM SIGARCH Computer Architecture News*, 23(1):5–12, March 1995. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sankaralingam:2003:EIT

[SNL+03] Karthikeyan Sankaralingam, Ramadass Nagarajan, Haiming Liu, Changkyu Kim, Jaehyuk Huh, Doug Burger, Stephen W. Keckler, and Charles R. Moore. Exploiting ILP, TLP, and DLP with the polymorphous TRIPS architecture. *ACM SIGARCH Computer Architecture News*, 31(2):422–433, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:2012:EES

[SNM+12] Abhayendra Singh, Satish Narayanasamy, Daniel Marino, Todd Millstein, and Madanlal Musuvathi. End-to-end sequential consistency. *ACM SIGARCH Computer Architecture News*, 40(3): 524–535, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Shafiee:2016:ICN

[SNM+16] Ali Shafiee, Anirban Nag, Naveen Muralimanohar, Rajeev Balasubramonian, John Paul Strachan, Miao Hu, R. Stanley Williams, and Vivek Srikumar. ISAAC: a convolutional neural network accelerator with in-situ analog arithmetic in crossbars. *ACM SIGARCH Computer Architecture News*, 44(3):14–26, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shahhoseini:1999:ABP

[SNN99] H. S. Shahhoseini, M. Naderi, and S. Nemati. Achieving the best performance on superscalar processors. *ACM SIGARCH Computer Architecture News*, 27(4):6–11, September 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Soejima:2014:MPF

[SOD+14] Rie Soejima, Koji Okina, Keisuke Dohi, Yuichiro Shibata, and Kiyoshi Oguri. A memory profiling framework for stencil computation on an FPGA accelerator with high level synthesis. *ACM SIGARCH Computer Architecture News*, 42(4):69–74, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sohi:1998:RMP

[Soh98a] Gurindar Sohi. Retrospective: Multiscalar processors. In ACM [ACM98a], pages 111–114. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order

Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Sohi:1998:RII

[Soh98b] Gurindar S. Sohi. Retrospective: Instruction issue logic for high-performance, interruptible pipelined processors. In ACM [ACM98a], pages 51–53. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Shye:2008:LLR

[SOM+08] Alex Shye, Berkin Ozisikyilmaz, Arindam Mallik, Gokhan Memik, Peter A. Dinda, Robert P. Dick, and Alok N. Choudhary. Learning and leveraging the relationship between architecture-level measurements and individual user satisfaction. *ACM SIGARCH Computer Architecture News*, 36(3):427–438, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sosic:1994:HCH

[Sos94] Rok Sosič. History cache: hardware support for reverse execution. *ACM SIGARCH Computer Architecture News*, 22(5):11–18, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suh:2005:DIA

[SOSD05] G. Edward Suh, Charles W. O'Donnell, Ishan Sachdev, and Srinivas Devadas. Design and implementation of the AEGIS single-chip secure processor using physical random functions. *ACM SIGARCH Computer Architecture News*, 33(2):25–36, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sovis:1983:UTS

[Sov83] František Soviš. Uniform theory of the shuffle-exchange type permutation networks. *ACM SIGARCH Computer Architecture News*, 11(3):185–191, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Samatham:1984:MNS

[SP84] M. R. Samatham and D. K. Pradhan. A multiprocessor network suitable for single-chip VLSI implementation. *ACM SIGARCH Computer Architecture News*, 12(3):328–339, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Samatham:1985:BMN

[SP85a] M. R. Samatham and D. K. Pradhan. The de Bruijn multiprocessor network: a versatile sorting network. *ACM SIGARCH Computer Architecture News*, 13(3):360–367, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1985:IPI

[SP85b] James E. Smith and Andrew R. Pleszkun. Implementation of precise interrupts in pipelined processors. *ACM SIGARCH Computer Architecture News*, 13 (3):36–44, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Swensen:1987:FTS

[SP87] J. Swensen and Y. Patt. Fast temporary storage for serial and parallel execution. *ACM SIGARCH Computer Architecture News*, 15(2):35–43, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singhal:1989:HPP

[SP89] A. Singhal and Y. N. Patt. A high performance Prolog processor with multiple function units. *ACM SIGARCH Computer Architecture News*, 17(3):195–202, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shustek:1998:RIT

[SP98a] Leonard J. Shustek and Bernard L. Peuto. Retrospective: an instruction timing model of CPU performance. In ACM [ACM98a], pages 11–12. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Smith:1998:IPI

[SP98b] James E. Smith and Andrew R. Pleszkun. Implementation of precise interrupts in pipelined processors. In ACM [ACM98a], pages 291–299. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Sorin:1998:AES

[SPA+98] Daniel J. Sorin, Vijay S. Pai, Sarita V. Adve, Mary K. Vernon, and David A. Wood. Analytic evaluation of shared-memory systems with ILP processors. *ACM SIGARCH*

Computer Architecture News, 26(3):380–391, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sherwood:2002:ACL

[SPHC02] Timothy Sherwood, Erez Perelman, Greg Hamerly, and Brad Calder. Automatically characterizing large scale program behavior. *ACM SIGARCH Computer Architecture News*, 30(5):45–57, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Swanson:2006:APT

[SPM+06] Steven Swanson, Andrew Putnam, Martha Mercaldi, Ken Michelson, Andrew Petersen, Andrew Schwerin, Mark Oskin, and Susan J. Eggers. Area-performance trade-offs in tiled dataflow architectures. *ACM SIGARCH Computer Architecture News*, 34(2):314–326, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saulsbury:1996:MMW

[SPN96] Ashley Saulsbury, Fong Pong, and Andreas Nowatzyk. Missing the memory wall: the case for processor/memory integration. *ACM SIGARCH Computer Architecture News*, 24 (2):90–101, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sundaramoorthy:2000:SPI

[SPR00] Karthik Sundaramoorthy, Zach Purser, and Eric Rotenburg. Slipstream processors: improving both performance and fault tolerance. *ACM SIGARCH Computer Architecture News*, 28(5):257–268, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Spradling:2007:SCB

[Spr07] Cloyce D. Spradling. SPEC CPU2006 benchmark tools. *ACM SIGARCH Computer Architecture News*, 35(1):130–134, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Soundararajan:2007:MBV

[SPS07] Niranjan Kumar Soundararajan, Angshuman Parashar, and Anand Sivasubramaniam. Mechanisms for bounding vulnerabilities of processor structures. *ACM SIGARCH Computer Architecture News*, 35(2):506–515, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suleman:2008:FDT

[SQP08] M. Aater Suleman, Moinuddin K. Qureshi, and Yale N. Patt. Feedback-driven threading: power-efficient and high-performance execution of multi-threaded workloads on CMPs. *ACM SIGARCH*

Computer Architecture News, 36(1):277–286, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srinivasan:2004:CFP

[SRA+04] Srikanth T. Srinivasan, Ravi Rajwar, Haitham Akkary, Amit Gandhi, and Mike Upton. Continual flow pipelines. *ACM SIGARCH Computer Architecture News*, 32(5):107–119, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sassone:2007:MSR

[SRB+07] Peter G. Sassone, Jeff Rupley II, Edward Brekelbaum, Gabriel H. Loh, and Bryan Black. Matrix scheduler reloaded. *ACM SIGARCH Computer Architecture News*, 35(2):335–346, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sethumadhavan:2007:LBE

[SRE+07] Simha Sethumadhavan, Franziska Roesner, Joel S. Emer, Doug Burger, and Stephen W. Keckler. Late-binding: enabling unordered load-store queues. *ACM SIGARCH Computer Architecture News*, 35(2):347–357, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Srivastava:2001:EOB

[Sri01] Amitabh Srivastava. Emerging opportunities for binary tools. *ACM SIGARCH Computer Architecture News*, 29 (1):26, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shayesteh:2005:DCS

[SRJ+05] Anahita Shayesteh, Glenn Reinman, Norman Jouppi, Suleyman Sair, and Tim Sherwood. Dynamically configurable shared CMP helper engines for improved performance. *ACM SIGARCH Computer Architecture News*, 33(4):70–79, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Santos:2014:UAT

[SRSW14] Nuno Santos, Himanshu Raj, Stefan Saroiu, and Alec Wolman. Using ARM trustzone to build a trusted language runtime for mobile applications. *ACM SIGARCH Computer Architecture News*, 42 (1):67–80, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shao:2014:APR

[SRWB14] Yakun Sophia Shao, Brandon Reagen, Gu-Yeon Wei, and David Brooks. Aladdin: a Pre-RTL, power-performance accelerator simulator enabling large design space exploration of customized architectures. *ACM SIGARCH Computer Architecture News*, 42 (3):97–108, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sadowski:1978:EPR

[SS78] Paul J. Sadowski and S. A. Schuster. Exploiting parallelism in a Relational Associative Processor. *ACM SIGARCH Computer Architecture News*, 7(2):99–109, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sweet:1982:EAM

[SS82] Richard E. Sweet and James G. Sandman, Jr. Empirical analysis of the mesa instruction set. *ACM SIGARCH Computer Architecture News*, 10(2):158–166, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Smith:1985:MUD

[SS85] Bradley Warren Smith and Howard Jay Siegel. Models for use in the design of macro-pipelined parallel processors. *ACM SIGARCH Computer Architecture News*, 13(3):116–123, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sweazey:1986:CCC

[SS86] P. Sweazey and A. J. Smith. A class of compatible cache consistency protocols and their support by the IEEE Futurebus. *ACM SIGARCH Computer Architecture News*, 14(2):414–423, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Scott:1989:UFC

[SS89] S. L. Scott and G. S. Sohi. Using feedback to control tree saturation in multistage interconnection networks. *ACM SIGARCH Computer Architecture News*, 17(3):167–176, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sodani:1997:DIR

[SS97] Avinash Sodani and Gurindar S. Sohi. Dynamic instruction reuse. *ACM SIGARCH Computer Architecture News*, 25(2):194–205, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sazeides:1998:MPP

[SS98] Yiannakis Sazeides and James E. Smith. Modeling program predictability. *ACM SIGARCH Computer Architecture News*, 26(3):73–84, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schkufza:2013:SS

[SSA13] Eric Schkufza, Rahul Sharma, and Alex Aiken. Stochastic superoptimization. *ACM SIGARCH Computer Architecture News*, 41(1):305–316, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sinha:2013:NRA

[SSAC13] Amitabha Sinha, Mitrava Sarkar, Soumojit Acharyya, and Suranjan Chakraborty. A novel reconfigurable architecture of a DSP processor for efficient mapping of DSP functions using field programmable DSP arrays. *ACM SIGARCH Computer Architecture News*, 41(2):1–8, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sridhar:2007:HLO

[SSB07] Swaroop Sridhar, Jonathan S. Shapiro, and Prashanth P. Bungale. HDTrans: a low-overhead dynamic translator. *ACM SIGARCH Computer Architecture News*, 35(1):135–140, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Swanson:1998:ITR

[SSC98] Mark Swanson, Leigh Stoller, and John Carter. Increasing TLB reach using superpages backed by shadow memory. *ACM SIGARCH Computer Architecture News*, 26(3):204–213, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sherwood:2003:PTP

[SSC03] Timothy Sherwood, Suleyman Sair, and Brad Calder. Phase tracking and prediction. *ACM SIGARCH Computer Architecture News*, 31(2):336–349, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shen:2013:PCF

[SSD+13] Kai Shen, Arrvindh Shriraman, Sandhya Dwarkadas, Xiao Zhang, and Zhuan Chen. Power containers: an OS facility for fine-grained power and energy management on multicore servers. *ACM SIGARCH Computer Architecture News*, 41(1):65–76, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Siegel:1984:PRP

[SSDK84] Howard Jay Siegel, Thomas Schwederski, Nathaniel J. Davis IV, and James T. Kuehn. PASM: a reconfigurable parallel system for image processing. *ACM SIGARCH Computer Architecture News*, 12(4):7–19, September 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Skadron:2003:TAM

[SSH+03] Kevin Skadron, Mircea R. Stan, Wei Huang, Sivakumar Velusamy, Karthik Sankaranarayanan, and David Tarjan. Temperature-aware microarchitecture. *ACM SIGARCH Computer Architecture News*, 31(2):2–13, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shriraman:2007:IHS

[SSH+07] Arrvindh Shriraman, Michael F. Spear, Hemayet Hossain, Virendra J. Marathe, Sandhya Dwarkadas, and Michael L. Scott. An integrated hardware-software approach to flexible transactional memory. *ACM SIGARCH Computer Architecture News*, 35(2):104–115, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seol:2016:EED

[SSJ+16] Hoseok Seol, Wongyu Shin, Jaemin Jang, Jungwhan Choi, Jinwoong Suh, and Lee-Sup Kim. Energy efficient data encoding in DRAM channels exploiting data value similarity. *ACM SIGARCH Computer Architecture News*, 44 (3):719–730, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sundararajah:2017:LTN

[SSK17] Kirshanthan Sundararajah, Laith Sakka, and Milind Kulkarni. Locality transformations for nested recursive iteration spaces. *ACM SIGARCH Computer Architecture News*, 45(1):281–295, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Shi:2007:CCP

[SSkP+07] Xudong Shi, Feiqi Su, Jih kwon Peir, Ye Xia, and Zhen Yang. CMP cache performance projection: accessibility vs. capacity. *ACM SIGARCH Computer Architecture News*, 35(1):13–20, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stunkel:1997:IMW

[SSP97] Craig B. Stunkel, Rajeev Sivaram, and Dhabaleswar K. Panda. Implementing multidestination worms in switch-based parallel systems: architectural alternatives and their impact. *ACM SIGARCH Computer Architecture News*, 25(2):50–61, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Son:2013:RMA

[SSR+13] Young Hoon Son, O. Seongil, Yuhwan Ro, Jae W. Lee, and

Jung Ho Ahn. Reducing memory access latency with asymmetric DRAM bank organizations. *ACM SIGARCH Computer Architecture News*, 41 (3):380–391, June 2013. ICSA '13 conference proceedings.

Strauss:2006:FSA

[SST06] Karin Strauss, Xiaowei Shen, and Josep Torrellas. Flexible snooping: Adaptive forwarding and filtering of snoops in embedded-ring multiprocessors. *ACM SIGARCH Computer Architecture News*, 34 (2):327–338, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Speight:2005:AMP

[SSZR05] Evan Speight, Hazim Shafi, Lixin Zhang, and Ram Rajamony. Adaptive mechanisms and policies for managing cache hierarchies in chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 33(2):346–356, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Strauss:1977:CNT

[ST77] Jon C. Strauss and Kenneth J. Thurber. Considerations for new tactical computer systems. *ACM SIGARCH Computer Architecture News*, 5 (7):135–140, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stevenson:1979:EEM

[ST79] Johan W. Stevenson and Andrew S. Tanenbaum. Efficient encoding of machine instructions. *ACM SIGARCH Computer Architecture News*, 7(8): 10–17, June 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sun:1987:SEP

[ST87] C. Sun and Y. Tsu. The sharing of environment in AND–OR-parallel execution of logic programs. *ACM SIGARCH Computer Architecture News*, 15(2):137–144, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Snavely:2000:SJS

[ST00] Allan Snavely and Dean M. Tullsen. Symbiotic job scheduling for a simultaneous multithreaded processor. *ACM SIGARCH Computer Architecture News*, 28(5):234–244, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shimizu:2003:TLS

[ST03] Naohiko Shimizu and Ken Takatori. A transparent Linux super page kernel for Alpha, Sparc64 and IA32: reducing TLB misses of applications. *ACM SIGARCH Computer Architecture News*, 31(1):75–84, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sundell:2008:NNB

[ST08] Hakan Sundell and Philippas Tsigas. NOBLE: non-blocking programming support via lock-free shared abstract data types. *ACM SIGARCH Computer Architecture News*, 36(5):80–87, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Staff:1979:CL

[sta79] Computer Architecture News staff. In the current literature. *ACM SIGARCH Computer Architecture News*, 7(10):22, October 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Staff:1980:CLAa

[sta80a] Computer Architecture News staff. Current literature: abstracts of articles of interest.... *ACM SIGARCH Computer Architecture News*, 8 (4):48, June 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Staff:1980:CLAb

[Sta80b] Computer Architecture News Staff. Current literature: abstracts of articles of interest.... *ACM SIGARCH Computer Architecture News*, 8(6): 46, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Staff:1981:ETP

[Sta81] Computer Architecture News Staff. Errata for two publications. *ACM SIGARCH Computer Architecture News*, 9(4):34, June 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stallings:1986:ABR

[Sta86] William Stallings. An annotated bibliography on reduced instruction set computers. *ACM SIGARCH Computer Architecture News*, 14(5):13–19, December 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Staknis:1989:SMA

[Sta89] M. E. Staknis. Sheaved memory: architectural support for state saving and restoration in pages systems. *ACM SIGARCH Computer Architecture News*, 17(2):96–102, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Steel:1977:AGP

[Ste77] Rod Steel. Another general purpose computer architecture. *ACM SIGARCH Computer Architecture News*, 5(8): 5–11, April 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stevenson:1980:RPI

[Ste80] David Stevenson. A report on the proposed IEEE Floating

Point Standard (IEEE Task p754). *ACM SIGARCH Computer Architecture News*, 8(5): 11–12, August 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stevenson:1981:PP

[Ste81] David Stevenson. The Phoenix Project. *ACM SIGARCH Computer Architecture News*, 9(2):12–15, April 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Steven:1988:NEA

[Ste88] Gordon B. Steven. A novel effective address calculation mechanism for RISC microprocessors. *ACM SIGARCH Computer Architecture News*, 16(4):150–156, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Steenkiste:1989:ICD

[Ste89a] P. Steenkiste. The impact of code density on instruction cache performance. *ACM SIGARCH Computer Architecture News*, 17(3):252–259, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stenstrom:1989:CCP

[Ste89b] P. Stenström. A cache consistency protocol for multiprocessors with multistage networks. *ACM SIGARCH Computer Architecture News*, 17(3):407–415, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sartin-Tarm:2013:CCS

[STND+13] Michael Sartin-Tarm, Tony Nowatzki, Lorenzo De Carli, Karthikeyan Sankaralingam, and Cristian Estan. Constraint centric scheduling guide. *ACM SIGARCH Computer Architecture News*, 41 (2):17–21, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Stokes:1986:THV

[Sto86] Roger Stokes. Traces for hardware verification. *ACM SIGARCH Computer Architecture News*, 14(4):7–14, September 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Strecker:1976:CMP

[Str76] William D. Strecker. Cache memories for PDP-11 family computers. *ACM SIGARCH Computer Architecture News*, 4(4):155–158, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stringa:1983:EIE

[Str83] Luigi Stringa. EMMA-an industrial experience on large multiprocessing architectures. *ACM SIGARCH Computer*

Architecture News, 11(3):326–333, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shin:2017:HLL

[STS17] Seunghee Shin, James Tuck, and Yan Solihin. Hiding the long latency of persist barriers using speculative execution. *ACM SIGARCH Computer Architecture News*, 45 (2):175–186, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sinclair:1994:IPS

[STV94] James B. Sinclair, Jay Tang, and Peter J. Varman. Instability in parallel I/O systems. *ACM SIGARCH Computer Architecture News*, 22 (4):11–16, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Su:1974:BRL

[Su74] Stephen Y. H. Su. Book review of *Logic and Logic Design* by B. Girling and H. G. Morning. International Textbook Company Limited 1973. *ACM SIGARCH Computer Architecture News*, 3(3): 2–3, September 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Su:1975:ICC

[Su75] Stephen Y. H. Su. An introduction to CHDL (computer hardware description languages). *ACM SIGARCH Computer Architecture News*, 4(3):22–23, September 1975. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Suri:2007:IIL

[Sur07] Tameesh Suri. Improving instruction level parallelism through reconfigurable units in superscalar processors. *ACM SIGARCH Computer Architecture News*, 35 (3):20–27, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sylvain:1974:DEA

[SV74] Pierre Sylvain and Maniel Vineberg. The design and evaluation of the array machine: a high-level language processor. *ACM SIGARCH Computer Architecture News*, 3(4):119–125, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schulthess:1982:ONA

[SV82] Peter Schulthess and Fritz Vonaesch. OPA: a new architecture for Pascal-like languages. *ACM SIGARCH Computer Architecture News*, 10(6):9–20, December 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1987:IIL

[SV87] G. S. Sohi and S. Vajapeyam. Instruction issue logic for high-performance, interruptible pipelined processors. *ACM SIGARCH Computer Architecture News*, 15 (2):27–34, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1989:TIF

[SV89] Gurindar S. Sohi and Sriram Vajapeyam. Tradeoffs in instruction format design for horizontal architectures. *ACM SIGARCH Computer Architecture News*, 17(2):15–25, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sohi:1998:IIL

[SV98] Gurindar S. Sohi and Sriram Vajapeyam. Instruction issue logic for high-performance, interruptible pipelined processors. In ACM [ACM98a], pages 329–336. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358`; `http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Schuchman:2005:RMT

[SV05] Ethan Schuchman and T. N. Vijaykumar. Rescue: a microarchitecture for testability and defect tolerance. *ACM SIGARCH Computer Architecture News*, 33(2):160–171, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Schuchman:2006:PTA

[SV06] Ethan Schuchman and T. N. Vijaykumar. A program transformation and architecture support for quantum uncomputation. *ACM SIGARCH Computer Architecture News*, 34(5):252–263, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sherwood:2003:PMA

[SVC03] Timothy Sherwood, George Varghese, and Brad Calder. A pipelined memory architecture for high throughput network processors. *ACM SIGARCH Computer Architecture News*, 31(2):288–299, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stryker:1974:SSA

[SW74] David Stryker and David Weiss. Secure system architecture. *ACM SIGARCH Computer Architecture News*, 3(2):37–38, June 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stanley:1987:PAA

[SW87] T. J. Stanley and R. G. Wedig. A performance analysis of automatically managed top of stack buffers. *ACM SIGARCH Computer Architecture News*, 15(2):272–281, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Saad:1990:SBP

[SW90] Youcef Saad and Harry A. G. Wijshoff. SPARK: a benchmark package for sparse computations. *ACM SIGARCH Computer Architecture News*, 18(3b):239–253, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sleiman:2016:ESO

[SW16] Faissal M. Sleiman and Thomas F. Wenisch. Efficiently scaling out-of-order cores for simultaneous multithreading. *ACM SIGARCH Computer Architecture News*, 44(3):431–443, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Somogyi:2006:SMS

[SWA+06] Stephen Somogyi, Thomas F. Wenisch, Anastassia Ailamaki, Babak Falsafi, and Andreas Moshovos. Spatial memory streaming. *ACM SIGARCH Computer Architecture News*, 34(2):252–263, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Somogyi:2009:STM

[SWAF09] Stephen Somogyi, Thomas F. Wenisch, Anastasia Ailamaki, and Babak Falsafi. Spatio-temporal memory streaming. *ACM SIGARCH Computer Architecture News*, 37(3):69–80, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Stoll:1995:EMP

[SWC+95] Gordon Stoll, Bin Wei, Douglas Clark, Edward W. Felten, Kai Li, and Patrick Hanrahan. Evaluating multiport frame buffer designs for a mesh-connected multicomputer. *ACM SIGARCH Computer Architecture News*, 23 (2):96–105, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Singh:1992:SSP

[SWG92] Jaswinder Pal Singh, Wolf-Dietrich Weber, and Anoop Gupta. SPLASH: Stanford parallel applications for shared-memory. *ACM SIGARCH Computer Architecture News*, 20(1):5–44, March 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seong:2010:SRP

[SWL10] Nak Hee Seong, Dong Hyuk Woo, and Hsien-Hsin S. Lee.

Security refresh: prevent malicious wear-out and increase durability for phase-change memory with dynamically randomized address mapping. *ACM SIGARCH Computer Architecture News*, 38(3):383–394, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Steele:2002:OHH

[SWW02] Ken Steele, Jason Waterman, and Eugene Weinstein. The Oxygen H21 handheld. *ACM SIGARCH Computer Architecture News*, 30(3):3–4, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sano:2010:PIA

[SWY10] Kentaro Sano, Luzhou Wang, and Satoru Yamamoto. Prototype implementation of array-processor extensible over multiple FPGAs for scalable stencil computation. *ACM SIGARCH Computer Architecture News*, 38(4):80–86, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sheng:2016:CCF

[SXYH16] Jiayi Sheng, Qingqing Xiong, Chen Yang, and Martin C. Herbordt. Collective communication on FPGA clusters with static scheduling. *ACM SIGARCH Computer Architecture News*, 44(4):2–7, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Su:1989:DSM

[SY89] H.-M. Su and P.-C. Yew. On data synchronization for multiprocessors. *ACM SIGARCH Computer Architecture News*, 17(3):416–423, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sano:2011:DSP

[SYH11] Kentaro Sano, Satoru Yamamoto, and Yoshiaki Hatsuda. Domain-specific programmable design of scalable streaming-array for power-efficient stencil computation. *ACM SIGARCH Computer Architecture News*, 39(4):44–49, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sanchez:2010:FAS

[SYK10] Daniel Sanchez, Richard M. Yoo, and Christos Kozyrakis. Flexible architectural support for fine-grain scheduling. *ACM SIGARCH Computer Architecture News*, 38(1):311–322, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Seong:2013:TLC

[SYL13] Nak Hee Seong, Sungkap Yeo, and Hsien-Hsin S. Lee. Tri-level-cell phase change memory: toward an efficient and reliable memory system. *ACM SIGARCH Computer Architecture News*, 41(3):440–451, June 2013. ICSA '13 conference proceedings.

StAmant:2014:GPC

[SYP+14] Renée St. Amant, Amir Yazdanbakhsh, Jongse Park, Bradley Thwaites, Hadi Esmaeilzadeh, Arjang Hassibi, Luis Ceze, and Doug Burger. General-purpose code acceleration with limited-precision analog computation. *ACM SIGARCH Computer Architecture News*, 42(3):505–516, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Sakai:1989:ADS

[SyYH+89] S. Sakai, y. Yamaguchi, K. Hiraki, Y. Kodama, and T. Yuba. An architecture of a dataflow single chip processor. *ACM SIGARCH Computer Architecture News*, 17 (3):46–53, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

So:1988:CPV

[SZ88] K. So and V. Zecca. Cache performance of vector processors. *ACM SIGARCH Computer Architecture News*, 16(2):261–268, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shin:2008:PWR

[SZBP08] Jeonghee Shin, Victor Zyuban, Pradip Bose, and Timothy M. Pinkston. A proactive wearout recovery approach for exploiting microarchitectural redundancy to extend cache SRAM lifetime. *ACM SIGARCH Computer Architecture News*, 36(3):353–362, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shen:2004:LPP

[SZD04] Xipeng Shen, Yutao Zhong, and Chen Ding. Locality phase prediction. *ACM SIGARCH Computer Architecture News*, 32(5):165–176, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Shen:2008:HCD

[SZD+08] Kai Shen, Ming Zhong, Sandhya Dwarkadas, Chuanpeng Li, Christopher Stewart, and Xiao Zhang. Hardware counter driven on-the-fly request signatures. *ACM SIGARCH Computer Architecture News*, 36(1):189–200, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Sias:2004:FTI

[SzUK+04] John W. Sias, Sain zee Ueng, Geoff A. Kent, Ian M. Steiner, Erik M. Nystrom, and Wen mei W. Hwu. Field-testing

IMPACT EPIC research results in Itanium 2. *ACM SIGARCH Computer Architecture News*, 32(2):26, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomasian:1976:DSS

[TA76] A. Thomasian and A. Avizienis. A design study of a shared resource computing system. *ACM SIGARCH Computer Architecture News*, 4(4):105–112, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takahashi:1983:DFP

[TA83] Naohisa Takahashi and Makoto Amamiya. A data flow processor array system: Design and analysis. *ACM SIGARCH Computer Architecture News*, 11(3):243–250, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tseng:2003:BMR

[TA03] Jessica H. Tseng and Krste Asanović. Banked multiported register files for high-frequency superscalar microprocessors. *ACM SIGARCH Computer Architecture News*, 31(2):62–71, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tabak:1988:LIM

[Tab88] Daniel Tabak. Logarithmic indices for multiprocessor evaluation. *ACM SIGARCH Computer Architecture News*, 16(1):85–90, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tabak:1995:CMH

[Tab95] Daniel Tabak. *Cache and Memory Hierarchy Design: A Performance-Directed Approach* by Steven A. Przybylski. *ACM SIGARCH Computer Architecture News*, 23 (3):28, June 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tabak:1996:BRA

[Tab96] Daniel Tabak. Book review: *Alpha Implementations and Architecture* by Dileep P. Bhandarkar. *ACM SIGARCH Computer Architecture News*, 24(1):17–18, March 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tabba:2010:ACP

[Tab10] Fuad Tabba. Adding concurrency in Python using a commercial processor's hardware transactional memory support. *ACM SIGARCH Computer Architecture News*, 38(5):12–19, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tuck:2008:SSE

[TACT08] James Tuck, Wonsun Ahn, Luis Ceze, and Josep Torrellas. SoftSig: software-exposed hardware signatures for code analysis and optimization. *ACM SIGARCH Computer Architecture News*, 36(1):145–156, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tada:2013:PED

[Tad13] Jubee Tada. Performance evaluation of 3-D stacked 32-bit parallel multipliers. *ACM SIGARCH Computer Architecture News*, 41(5):89–94, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tagg:1985:SEA

[Tag85] A. G. Tagg. Speculations on the evolution of an architecture. *ACM SIGARCH Computer Architecture News*, 13 (2):11–18, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takesue:1987:URM

[Tak87] M. Takesue. A unified resource management and execution control mechanism for data flow machines. *ACM SIGARCH Computer Architecture News*, 15(2):90–97, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takacs:1988:BRV

[Tak88] Helen C. Takacs. Book review: *A VLSI Architecture for Concurrent Data Structures* by William J. Dally (Kluwer 1988). *ACM SIGARCH Computer Architecture News*, 16 (4):192–193, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thoziyoor:2008:CMM

[TAM+08] Shyamkumar Thoziyoor, Jung Ho Ahn, Matteo Monchiero, Jay B. Brockman, and Norman P. Jouppi. A comprehensive memory modeling tool and its application to the design and analysis of future memory hierarchies. *ACM SIGARCH Computer Architecture News*, 36(3):51–62, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanenbaum:1977:AMA

[Tan77] Andrew S. Tanenbaum. Ambiguous machine architecture and program efficiency. *ACM SIGARCH Computer Architecture News*, 6(3):11–13, August 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanenbaum:1978:RPA

[Tan78] Andrew S. Tanenbaum. Review of *Processor Architecture* by S. H. Lavington, NCC Publications, Manchester 1976.

ACM SIGARCH Computer Architecture News, 6(6):31, February 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanimoto:1983:PAP

[Tan83] Steven L. Tanimoto. A pyramidal approach to parallel processing. *ACM SIGARCH Computer Architecture News*, 11(3):372–378, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tam:2009:RAL

[TASS09] David K. Tam, Reza Azimi, Livio B. Soares, and Michael Stumm. RapidMRC: approximating L2 miss rate curves on commodity systems for online optimizations. *ACM SIGARCH Computer Architecture News*, 37(1):121–132, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

T:2010:DDF

[TAV10] Shobha T., Syed Akram, and G. Varaprasad. Design and development of framework for diagnosing intermediate nodes. *ACM SIGARCH Computer Architecture News*, 38(5):7–11, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thakur:1994:CCD

[TBC94] Rajeev Thakur, Rajesh Bordawekar, and Alok Choudhary. Compilation of out-of-core data parallel programs for distributed memory machines. *ACM SIGARCH Computer Architecture News*, 22(4):23–28, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Teodosiu:1997:HFC

[TBG+97] Dan Teodosiu, Joel Baxter, Kinshuk Govil, John Chapin, Mendel Rosenblum, and Mark Horowitz. Hardware fault containment in scalable shared-memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 25(2):73–84, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tsoi:2012:MRS

[TBL12] Kuen Hung Tsoi, Tobias Becker, and Wayne Luk. Modelling reconfigurable systems in event driven simulation. *ACM SIGARCH Computer Architecture News*, 40(5):34–39, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Tsai:2017:JSD

[TBS17] Po-An Tsai, Nathan Beckmann, and Daniel Sanchez.

Jenga: Software-defined cache hierarchies. *ACM SIGARCH Computer Architecture News*, 45(2):652–665, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thapar:1991:CCL

[TD91] Manu Thapar and Bruce Delagi. Cache coherence for large scale shared memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 19(1):114–119, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Taylor:1990:TSL

[TDF90] George Taylor, Peter Davies, and Michael Farmwald. The TLB slice—a low-cost high-speed address translation mechanism. *ACM SIGARCH Computer Architecture News*, 18(3a):355–363, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:1993:LCP

[TE93] Dean M. Tullsen and Susan J. Eggers. Limitations of cache prefetching on a bus-based multiprocessor. *ACM SIGARCH Computer Architecture News*, 21(2):278–288, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thekkath:1994:ISB

[TE94] R. Thekkath and S. J. Eggers. Impact of sharing-based thread placement on multithreaded architectures. *ACM SIGARCH Computer Architecture News*, 22(2):176–186, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:1996:ECI

[TEE+96] Dean M. Tullsen, Susan J. Eggers, Joel S. Emer, Henry M. Levy, Jack L. Lo, and Rebecca L. Stamm. Exploiting choice: instruction fetch and issue on an implementable simultaneous multithreading processor. *ACM SIGARCH Computer Architecture News*, 24(2):191–202, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:1995:SMM

[TEL95] Dean M. Tullsen, Susan J. Eggers, and Henry M. Levy. Simultaneous multithreading: maximizing on-chip parallelism. *ACM SIGARCH Computer Architecture News*, 23(2):392–403, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:1998:RSM

[TEL98a] Dean M. Tullsen, Susan J. Eggers, and Henry M. Levy. Retrospective: Simultaneous multithreading: maximizing on-chip parallelism. In ACM [ACM98a], pages 115–116. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Tullsen:1998:SMM

[TEL98b] Dean M. Tullsen, Susan J. Eggers, and Henry M. Levy. Simultaneous multithreading: maximizing on-chip parallelism. In ACM [ACM98a], pages 533–544. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Temam:2010:RNN

[Tem10] Olivier Temam. The rebirth of neural networks. *ACM SIGARCH Computer Architecture News*, 38(3):349, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Temam:2012:DTA

[Tem12] Olivier Temam. A defect-tolerant accelerator for emerging high-performance applications. *ACM SIGARCH Computer Architecture News*, 40 (3):356–367, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Teodosiu:1990:CTD

[Teo90] Dan Teodosiu. Computing in three dimensions. *ACM SIGARCH Computer Architecture News*, 18(1):99, March 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Terry:1987:FCM

[Ter87] J. M. Terry. Flow-control machines:the structured execution architecture (SXA). *ACM SIGARCH Computer Architecture News*, 15(4):58–69, September 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thurber:1979:BLC

[TF79] Kenneth J. Thurber and Harvey A. Freeman. A bibliography of local computer network architectures. *ACM SIGARCH Computer Architecture News*, 7(5):22–27, February 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tamir:1988:HPM

[TF88] Y. Tamir and G. L. Frazier. High-performance multi-queue buffers for VLSI communications switches. *ACM SIGARCH Computer Architecture News*, 16(2):343–354, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thornock:2001:NTC

[TF01] Niki C. Thornock and J. Kelly Flanagan. A national trace collection and distribution resource. *ACM SIGARCH Computer Architecture News*, 29(3):6–10, June 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomas:2003:IBP

[TFWS03] Renju Thomas, Manoj Franklin, Chris Wilkerson, and Jared Stark. Improving branch prediction by dynamic dataflow-based identification of correlated branches from a large global history. *ACM SIGARCH Computer Architecture News*, 31(2):314–323, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanasic:2014:EPM

[TGC+14] Ivan Tanasic, Isaac Gelado, Javier Cabezas, Alex Ramirez, Nacho Navarro, and Mateo Valero. Enabling preemptive multiprogramming on GPUs. *ACM SIGARCH Computer Architecture News*, 42(3):193–204, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Towles:2014:UCI

[TGGS14] Brian Towles, J. P. Grossman, Brian Greskamp, and David E. Shaw. Unifying on-chip and inter-node switching within the Anton 2 network. *ACM SIGARCH Computer Architecture News*, 42(3):1–12, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tadonki:2010:ECL

[TGP10] Claude Tadonki, Gilbert Grodidier, and Olivier Pene. An efficient CELL library for lattice quantum chromodynamics. *ACM SIGARCH Computer Architecture News*, 38(4):60–65, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Trambacz:1976:TDP

[TH76] Ulrich Trambacz and Georg Hyla. A taxonomy of display processors. *ACM SIGARCH Computer Architecture News*, 4(4):119–120, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Treleaven:1982:RCA

[TH82] Philip C. Treleaven and Richard P. Hopkins. A recursive computer architecture for VLSI. *ACM SIGARCH Computer Architecture News*, 10(3):229–238, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thakkar:1986:IFU

[TH86] S. S. Thakkar and W. E. Hostmann. An instruction fetch unit for a graph reduction machine. *ACM SIGARCH Computer Architecture News*, 14 (2):82–91, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tan:2003:DAP

[TH03] Edwin J. Tan and Wendi B. Heinzelman. DSP architectures: past, present and futures. *ACM SIGARCH Computer Architecture News*, 31 (3):6–19, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thacker:2010:IFE

[Tha10] Charles P. Thacker. Improving the future by examining the past. *ACM SIGARCH Computer Architecture News*, 38(3):348, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tada:2016:ESG

[THEK16] Jubee Tada, Maiki Hosokawa, Ryusuke Egawa, and Hiroaki Kobayashi. Effects of stacking granularity on 3-D stacked floating-point fused multiply add units. *ACM SIGARCH Computer Architecture News*, 44(4):62–67, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Taylor:1986:ESL

[THL+86] G. S. Taylor, P. N. Hilfinger, J. R. Larus, D. A. Patterson, and B. G. Zorn. Evaluation of the SPUR Lisp architecture. *ACM SIGARCH Computer Architecture News*, 14(2):444–452, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Torres-Huitzil:2014:AEI

[THNM14] Cesar Torres-Huitzil and Marco Aurelio Nuño-Maganda. Area-time efficient implementation of local adaptive image thresholding in reconfigurable hardware. *ACM SIGARCH Computer Architecture News*, 42(4):33–38, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorelli:1976:RAC

[Tho76] Lars-Erik Thorelli. Representation of arrays in computers. *ACM SIGARCH Computer Architecture News*, 5(1): 6–9, April 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thornton:1981:ASC

[Tho81] James E. Thornton. 8th Annual Symposium on Computer Architecture: Heterogeneous Computer Architecture. *ACM SIGARCH Computer Architecture News*, 9(4):25–33, June 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1990:UN

[Tho90] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 18(4):80–89, December 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1991:UNa

[Tho91a] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 19(1):146–150, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1991:UNb

[Tho91b] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 19(4):185–191, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1991:UNc

[Tho91c] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 19(5):21–26, September 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1991:UNd

[Tho91d] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 19(6):19–23, December 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1992:UNa

[Tho92a] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 20(3):56–62, June 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1992:UNb

[Tho92b] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 20(4):56–64, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1992:UNc

[Tho92c] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 20(5):28–33, December 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1993:UNa

[Tho93a] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 21(1):36–38, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1993:UNb

[Tho93b] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 21(3):46–49, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1993:UNc

[Tho93c] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 21(4):27–28, September 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1993:UNd

[Tho93d] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 21(5):79–85, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1994:IN

[Tho94a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 22(5):41–46, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1994:UNa

[Tho94b] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 22(1):59–60, March 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1994:UNb

[Tho94c] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 22(3):27–28, June 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1994:UNc

[Tho94d] Mark Thorson. Usenet nuggets. *ACM SIGARCH Computer Architecture News*, 22(4):78–81, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1995:INa

[Tho95a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 23(1):25–28, March 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1995:INb

[Tho95b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 23(3):25–27, June 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1995:INc

[Tho95c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 23(5):43–44, December 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1996:INa

[Tho96a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 24(1):12–16, March 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1996:INb

[Tho96b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 24(3):26–32, June 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1997:INa

[Tho97a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 25(1):34–36, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1997:INb

[Tho97b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 25(3):26–27, June 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1997:INc

[Tho97c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 25(4):36–41, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1997:INd

[Tho97d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 25(5):10–14, December 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1998:INaa

[Tho98a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 26(1):12–17, March 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1998:INb

[Tho98b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 26(2):18–22, May 1998. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1998:INc

[Tho98c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 26(4):12–16, September 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1999:INa

[Tho99a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 27(3):53–60, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1999:INb

[Tho99b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 27(4):12–14, September 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:1999:INc

[Tho99c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 27(5):6–10, December 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2000:INa

[Tho00a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 28(1):77–78, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2000:INb

[Tho00b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 28(3):9–13, June 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2001:INa

[Tho01a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 29(1):75–77, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2001:INb

[Tho01b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 29(3):11–15, June 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2001:INc

[Tho01c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 29(4):29–31, September 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2001:INd

[Tho01d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 29(5):86–90, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2002:INa

[Tho02a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 30(1):15–21, March 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2002:INb

[Tho02b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 30(3):25–26, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2002:INc

[Tho02c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 30(4):11–16, September 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2003:INa

[Tho03a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 31(1):93–96, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2003:INb

[Tho03b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 31(3):48–54, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2003:INc

[Tho03c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 31(4):26–32, September 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2003:INd

[Tho03d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 31(5):16–21, December 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorup:2003:CPM

[Tho03e] Mikkel Thorup. Combinatorial power in multimedia processors. *ACM SIGARCH Computer Architecture News*, 31(4):5–11, September 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2004:INa

[Tho04a] Mark Thorson. Internet nuggets. *ACM SIGARCH*

Computer Architecture News, 32(1):9–13, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2004:INb

[Tho04b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 32(3):78–83, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2004:INc

[Tho04c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 32(4):23–41, September 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2005:INa

[Tho05a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 33(1):156–160, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2005:INb

[Tho05b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 33(3):72–74, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2005:INc

[Tho05c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 33(4):128–133, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2005:INd

[Tho05d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 33(5):87–93, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2006:INa

[Tho06a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 34(1):81–86, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2006:INb

[Tho06b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 34(3):16–21, June 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2006:IN

[Tho06c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 34(4):34–37, September 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2007:INa

[Tho07a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 35(1):149–154, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2007:INb

[Tho07b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 35(3):53–55, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2007:INc

[Tho07c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 35(4):59–62, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2007:INd

[Tho07d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 35(5):71–73, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2008:INa

[Tho08a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 36(4):7–11, September 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2008:INb

[Tho08b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 36(5):101–111, December 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomasian:2009:PSS

[Tho09a] Alexander Thomasian. Publications on storage and systems research. *ACM SIGARCH Computer Architecture News*, 37(4):1–26, September 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2009:INa

[Tho09b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 37(2):66–69, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2009:INb

[Tho09c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 37(4):45–51, September 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2009:INc

[Tho09d] Mark Thorson. Internet nuggets. *ACM SIGARCH*

Computer Architecture News, 37(5):24–30, December 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomasian:2010:SRI

[Tho10a] Alexander Thomasian. Storage research in industry and universities. *ACM SIGARCH Computer Architecture News*, 38(2):1–48, May 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomasian:2010:WSD

[Tho10b] Alexander Thomasian. Why specialized disks for composite operations may be unnecessary. *ACM SIGARCH Computer Architecture News*, 38(5):20–27, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2010:INa

[Tho10c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 38(2):64–67, May 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2010:INb

[Tho10d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 38(4):93–96, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2010:INc

[Tho10e] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 38(5):28–36, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomasian:2011:SAD

[Tho11a] Alexander Thomasian. Survey and analysis of disk scheduling methods. *ACM SIGARCH Computer Architecture News*, 39(2):8–25, May 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thorson:2011:INa

[Tho11b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 39(2):36–52, May 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2011:INb

[Tho11c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 39(4):108–117, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2011:INc

[Tho11d] Mark Thorson. Internet nuggets. *ACM SIGARCH*

Computer Architecture News, 39(5):19–23, December 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thomasian:2012:RPR

[Tho12a] Alexander Thomasian. Rebuild processing in RAID5 with emphasis on the supplementary parity augmentation method. *ACM SIGARCH Computer Architecture News*, 40(2):18–27, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2012:INa

[Tho12b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 40(2):44–49, May 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2012:INb

[Tho12c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 40(4):44–48, September 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2012:INc

[Tho12d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 40(5):93–112, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Thomasian:2013:DAM

[Tho13a] Alexander Thomasian. Disk arrays with multiple RAID levels. *ACM SIGARCH Computer Architecture News*, 41 (5):6–24, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2013:INa

[Tho13b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 41(2):56–71, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2013:INb

[Tho13c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 41(4):13–22, September 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2013:INc

[Tho13d] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 41(5):119–127, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2014:INa

[Tho14a] Mark Thorson. Internet nuggets. *ACM SIGARCH*

Computer Architecture News, 42(2):24–36, May 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2014:INb

[Tho14b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 42(4):93–101, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2014:INc

[Tho14c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 42(4):93–101, 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2015:INa

[Tho15a] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 43(3):10–16, May 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2015:INb

[Tho15b] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 43(4):94–100, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2015:INc

[Tho15c] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 43(5):7–11, December 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thorson:2016:INa

[Tho16] Mark Thorson. Internet nuggets. *ACM SIGARCH Computer Architecture News*, 44(1):19–22, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thurber:1976:ANR

[Thu76] Kenneth J. Thurber. ARPS: a new real-time computer. *ACM SIGARCH Computer Architecture News*, 5(4):6–16, October 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thurber:1978:CCT

[Thu78] Kenneth J. Thurber. Computer communication techniques. *ACM SIGARCH Computer Architecture News*, 7(3):7–16, October 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tick:1988:DBP

[Tic88] E. Tick. Data buffer performance for sequential Prolog architectures. *ACM*

SIGARCH Computer Architecture News, 16(2):434–442, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Torres:2005:SBD

[TIVL05] E. F. Torres, P. Ibanez, V. Vinals, and J. M. Llaberia. Store buffer design in first-level multibanked data caches. *ACM SIGARCH Computer Architecture News*, 33(2):469–480, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Talla:2001:MDA

[TJ01] Deependra Talla and Lizy K. John. MediaBreeze: a decoupled architecture for accelerating multimedia applications. *ACM SIGARCH Computer Architecture News*, 29(5):62–67, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takefuji:1988:MCS

[TJCC88] Y. Takefuji, R. Jannarone, Y. B. Cho, and T. Chen. Multinomial conjunctoid statistical learning machines. *ACM SIGARCH Computer Architecture News*, 16(2):12–17, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tokoro:1983:WSC

[TJS83] Mario Tokoro, J. R. Jagannathan, and Hideki Sunahara. On the working set concept for data-flow machines. *ACM SIGARCH Computer Architecture News*, 11 (3):90–97, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanaka:2007:LER

[TK07] Kiyofumi Tanaka and Takahiro Kawahara. Leakage energy reduction in cache memory by data compression. *ACM SIGARCH Computer Architecture News*, 35(5):17–24, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thies:2002:CML

[TKG+02] William Thies, Michal Karczmarek, Michael Gordon, David Maze, Jeremy Wong, Henry Hoffmann, Matthew Brown, and Saman Amarasinghe. A common machine language for grid-based architectures. *ACM SIGARCH Computer Architecture News*, 30(3):13–14, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Talluri:1992:TST

[TKHP92] Madhusudhan Talluri, Shing Kong, Mark D. Hill, and David A. Patterson. Tradeoffs in supporting two page sizes. *ACM SIGARCH Computer Architecture News*, 20(2):415–424, May 1992. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:2007:ISI

[TKJ07] Dean Tullsen, Rakesh Kumar, and Norman P. Jouppi. Introduction to the special issue on the 2006 Workshop on Design, Analysis, and Simulation of Chip Multiprocessors: (dasCMP'06). *ACM SIGARCH Computer Architecture News*, 35(1):2, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tyagi:2000:COP

[TL00] Akhilesh Tyagi and Gyungho Lee. A compiler optimization paradigm for dynamic energy management. *ACM SIGARCH Computer Architecture News*, 28(1):72–76, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Taylor:2010:SBB

[TL10] Ryan Taylor and Xiaoming Li. Software-based branch predication for AMD GPUs. *ACM SIGARCH Computer Architecture News*, 38(4):66–72, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tsoi:2011:PPO

[TL11] Kuen Hung Tsoi and Wayne Luk. Power profiling and optimization for heterogeneous multi-core systems. *ACM SIGARCH Computer Architecture News*, 39(4):8–13, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thomasian:2014:BDA

[TLD14] Alexander Thomasian, Bingxing Liu, and Yuhui Deng. Balancing disk access times in RAID5 disk arrays in degraded mode by conditionally prioritizing fork/join requests. *ACM SIGARCH Computer Architecture News*, 42 (2):15–19, May 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tseng:2007:DHS

[TLLL07] Kuo-Kun Tseng, Ying-Dar Lin, Tsern-Huei Lee, and Yuan-Cheng Lai. Deterministic high-speed root-hashing automaton matching coprocessor for embedded network processor. *ACM SIGARCH Computer Architecture News*, 35(3):36–43, June 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Taylor:2004:ERM

[TLM+04] Michael Bedford Taylor, Walter Lee, Jason Miller, David Wentzlaff, Ian Bratt, Ben Greenwald, Henry Hoffmann, Paul Johnson, Jason Kim, James Psota, Arvind Saraf, Nathan Shnidman, Volker

Strumpen, Matt Frank, Saman Amarasinghe, and Anant Agarwal. Evaluation of the raw microprocessor: An exposed-wire-delay architecture for ILP and Streams. *ACM SIGARCH Computer Architecture News*, 32(2): 2, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Treleaven:1980:MPR

[TM80] Philip C. Treleaven and Geoffrey F. Mole. A multiprocessor reduction machine for user-defined reduction languages. *ACM SIGARCH Computer Architecture News*, 8(3):121–130, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Talpes:2005:ISP

[TM05] Emil Talpes and Diana Marculescu. Increased scalability and power efficiency by using multiple speed pipelines. *ACM SIGARCH Computer Architecture News*, 33(2):310–321, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Trouve:2011:ADA

[TM11] Antoine Trouve and Kazuaki Murakami. Augmenting DR-ASIP flexibility through multi-mode custom instructions. *ACM SIGARCH Computer Architecture News*, 39 (4):90–93, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tanabe:2014:FAO

[TM14a] Yu Tanabe and Tsutomu Maruyama. Fast and accurate optical flow estimation using FPGA. *ACM SIGARCH Computer Architecture News*, 42(4):27–32, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tsuyama:2014:GFA

[TM14b] Haruhisa Tsuyama and Tsutomu Maruyama. GPU and FPGA acceleration of level set method. *ACM SIGARCH Computer Architecture News*, 42(4):21–25, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thaker:2006:QMH

[TMC+06] Darshan D. Thaker, Tzvetan S. Metodi, Andrew W. Cross, Isaac L. Chuang, and Frederic T. Chong. Quantum memory hierarchies: Efficient designs to match available parallelism in quantum computing. *ACM SIGARCH Computer Architecture News*, 34(2):378–390, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thekkath:2000:ASC

[TML+00] David Lie Chandramohan Thekkath, Mark Mitchell, Patrick Lincoln, Dan Boneh, John Mitchell, and Mark Horowitz. Architectural support for copy and tamper resistant software. *ACM SIGARCH Computer Architecture News*, 28(5):168–177, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Trippel:2017:TMM

[TML+17] Caroline Trippel, Yatin A. Manerkar, Daniel Lustig, Michael Pellauer, and Margaret Martonosi. TriCheck: Memory model verification at the trisection of software, hardware, and ISA. *ACM SIGARCH Computer Architecture News*, 45(1):119–133, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tang:2011:IMS

[TMV+11] Lingjia Tang, Jason Mars, Neil Vachharajani, Robert Hundt, and Mary Lou Soffa. The impact of memory subsystem resource sharing on datacenter applications. *ACM SIGARCH Computer Architecture News*, 39(3):283–294, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Touzet:2001:SSE

[TMW+01] David Touzet, Jean-Marc Menaud, Frédéric Weis, Paul Couderc, and Michel Banâtre. SIDE surfer: enriching casual meetings with spontaneous information gathering. *ACM SIGARCH Computer Architecture News*, 29(5):76–83, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tang:2013:RRS

[TMW+13] Lingjia Tang, Jason Mars, Wei Wang, Tanima Dey, and Mary Lou Soffa. ReQoS: reactive static/dynamic compilation for QoS in warehouse scale computers. *ACM SIGARCH Computer Architecture News*, 41(1):89–100, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Taki:1987:PAE

[TNNI87] Kazuo Taki, Katzuto Nakajima, Hiroshi Nakashima, and Morihiro Ikeda. Performance and architectural evaluation of the PSI machine. *ACM SIGARCH Computer Architecture News*, 15(5):128–135, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanabe:2011:SFB

[TNY11] Shoji Tanabe, Takuya Nagashima, and Yoshiki Yamaguchi. A study of an FPGA based flexible SIMD processor. *ACM SIGARCH Computer Architecture News*, 39 (4):86–89, September 2011.

CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tobias:1980:SUM

[Tob80] Jeffrey M. Tobias. A single user multiprocessor incorporating processor manipulation facilities. *ACM SIGARCH Computer Architecture News*, 8(3):131–138, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tiwari:2011:CUM

[TOL+11] Mohit Tiwari, Jason K. Oberg, Xun Li, Jonathan Valamehr, Timothy Levin, Ben Hardekopf, Ryan Kastner, Frederic T. Chong, and Timothy Sherwood. Crafting a usable microkernel, processor, and I/O system with strict and provable information flow security. *ACM SIGARCH Computer Architecture News*, 39 (3):189–200, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tsoukarellas:1990:RTS

[TP90] M. A. Tsoukarellas and T. S. Papatheodorou. A run time support system for multiprocessor machines. *ACM SIGARCH Computer Architecture News*, 18(3b):470–478, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tseng:2008:AOP

[TP08] Francis Tseng and Yale N. Patt. Achieving out-of-order performance with almost in-order complexity. *ACM SIGARCH Computer Architecture News*, 36(3):3–12, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tong:2015:HTS

[TP15] Da Tong and Viktor Prasanna. High throughput sketch based online heavy hitter detection on FPGA. *ACM SIGARCH Computer Architecture News*, 43(4):70–75, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Thurber:1977:ATC

[TPD+77] Kenneth J. Thurber, Peter C. Patton, Robert C. Deward, Jon C. Strauss, and Thomas W. Petschauer. An advanced tactical computer concept. *ACM SIGARCH Computer Architecture News*, 5(7):141–146, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tarditi:2006:AUD

[TPO06] David Tarditi, Sidd Puri, and Jose Oglesby. Accelerator: using data parallelism to program GPUs for general-purpose uses. *ACM SIGARCH Computer Architecture News*, 34(5):325–335, December 2006. CODEN OSRED8. ISSN 0163-5980.

Tan:2015:DWS

[TQC+15] Zhangxi Tan, Zhenghao Qian, Xi Chen, Krste Asanovic, and David Patterson. DIABLO: a warehouse-scale computer network simulator using FPGAs. *ACM SIGARCH Computer Architecture News*, 43 (1):207–221, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Traub:1985:APG

[Tra85] Kenneth R. Traub. An abstract parallel graph reduction machine. *ACM SIGARCH Computer Architecture News*, 13(3):333–341, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tan:1991:GEN

[TRA91] Wei Siong Tan, H. Russ, and Cecil O. Alford. GT-EP: a novel high-performance real-time architecture. *ACM SIGARCH Computer Architecture News*, 19(3):13–21, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Treleaven:1980:VMA

[Tre80] Philip C. Treleaven. VLSI: machine architecture and very high level languages. *ACM SIGARCH Computer Architecture News*, 8(7):27–38, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Treleaven:1983:NGC

[Tre83] Philip C. Treleaven. The new generation of computer architecture. *ACM SIGARCH Computer Architecture News*, 11(3):402–409, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Trivedi:1980:DLS

[Tri80] K. S. Trivedi. Designing linear storage hierarchies so as to maximize reliability subject to cost and performance constraints. *ACM SIGARCH Computer Architecture News*, 8(3):211–217, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thacker:1987:FMW

[TS87] Charles P. Thacker and Lawrence C. Stewart. Firefly: a multiprocessor workstation. *ACM SIGARCH Computer Architecture News*, 15(5):164–172, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takahashi:1990:PAW

[TS90a] Yoshizo Takahashi and Shigetaka Sasaki. Parallel automated wire-routing with a number of competing processors. *ACM SIGARCH Computer Architecture News*, 18(3b):310–317, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thakkar:1990:POA

[TS90b] Shreekant S. Thakkar and Mark Sweiger. Performance of an OLTP application on symmetry multiprocessor system. *ACM SIGARCH Computer Architecture News*, 18(3a): 228–238, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tullsen:1999:SVP

[TS99] Dean M. Tullsen and John S. Seng. Storageless value prediction using prior register values. *ACM SIGARCH Computer Architecture News*, 27(2):270–279, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tan:2005:HTS

[TS05] Lin Tan and Timothy Sherwood. A high throughput string matching architecture for intrusion detection and prevention. *ACM SIGARCH Computer Architecture News*, 33(2):112–122, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tsang:2010:DPR

[TS10] Chi-Chiu Tsang and Hayden Kwok-Hay So. Dynamic power reduction of FPGA-based reconfigurable computers using precomputation. *ACM SIGARCH Computer Architecture News*, 38(4):87–92, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tsafrir:2016:SAW

[Tsa16] Dan Tsafrir. Synopsis of the ASPLOS '16 Wild and Crazy Ideas (WACI) invited-speakers session. *ACM SIGARCH Computer Architecture News*, 44(2):291–294, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Torrant:1999:SMS

[TSCH99] Marc Torrant, Muhammad Shaaban, Roy Czernikowski, and Ken Hsu. A simultaneous multithreading simulator. *ACM SIGARCH Computer Architecture News*, 27(5):1–5, December 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tomita:1983:UML

[TSK+83] Shinji Tomita, Kiyoshi Shibayama, Toshiaki Kitamura, Toshiyuki Nakata, and Hiroshi Hagiwara. A user-microprogrammable, local host computer with low-level parallelism. *ACM SIGARCH Computer Architecture News*, 11(3):151–157, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tanaka:2013:USP

[TSK13] Yuichiroh Tanaka, Shimpei Sato, and Kenji Kise. The UltraSmall soft processor. *ACM SIGARCH Computer Architecture News*, 41(5):95–100, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tomita:1986:CLL

[TSN+86] S. Tomita, K. Shibayama, T. Nakata, S. Yuasa, and H. Hagiwara. A computer with low-level parallelism QA-2: its applications to 3-D graphics and Prolog/Lisp machines. *ACM SIGARCH Computer Architecture News*, 14(2):280–289, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tiwari:2007:RPA

[TST07] Abhishek Tiwari, Smruti R. Sarangi, and Josep Torrellas. ReCycle: pipeline adaptation to tolerate process variation. *ACM SIGARCH Computer Architecture News*, 35(2):323–334, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tokoro:1982:SSI

[TT82] Mario Tokoro and Takashi Takizuka. On the semantic structure of information — a proposal of the abstract storage architecture. *ACM SIGARCH Computer Architecture News*, 10(3):211–217, April 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Teodorescu:2008:VAA

[TT08] Radu Teodorescu and Josep Torrellas. Variation-aware application scheduling and power management for chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 36(3):363–374, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tribino:2012:PPA

[TTCM12] Julien Tribino, Antoine Trouvé, Hadrien A. Clarke, and Kazuaki J. Murakami. PASTIS: a photonic arbitration with scalable token injection scheme. *ACM SIGARCH Computer Architecture News*, 40(5):76–81, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Tu:2013:SDS

[TtLcC13] Cheng-Chun Tu, Chao tang Lee, and Tzi cker Chiueh. Secure I/O device sharing among virtual machines on multiple hosts. *ACM SIGARCH Computer Architecture News*, 41 (3):108–119, June 2013. ICSA '13 conference proceedings.

Tokoro:1980:HLM

[TTMH80] Mario Tokoro, Kiichiro Tamaru, Masaaki Mizuno, and Masao Hori. A high level multilingual multiprocessor KMP/II. *ACM SIGARCH Computer Architecture News*, 8(3):325–333, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tsoi:2010:PFC

[TTPL10] Kuen Hung Tsoi, Anson H. T. Tse, Peter Pietzuch, and Wayne Luk. Programming framework for clusters with heterogeneous accelerators. *ACM SIGARCH Computer Architecture News*, 38(4):53–59, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tse:2010:ERD

[TTTL10] Anson H. T. Tse, David B. Thomas, K. H. Tsoi, and Wayne Luk. Efficient reconfigurable design for pricing Asian options. *ACM SIGARCH Computer Architecture News*, 38(4):14–20, September 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Turton:1979:PHS

[Tur79] Trevor Turton. A proposed high-speed computer design. *ACM SIGARCH Computer Architecture News*, 7(10):7–21, October 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tredennick:1977:HSB

[TW77] H. L. Tredennick and T. A. Welch. High-speed buffering for variable length operands. *ACM SIGARCH Computer Architecture News*, 5(7):205–210, March 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Thomborson:1991:SIM

[TW91] Clark D. Thomborson and Belle W.-Y. Wei. Systolic implementations of a move-to-front text compressor. *ACM SIGARCH Computer Architecture News*, 19(1):53–60, March 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Torng:2016:AAW

[TWB16] Christopher Torng, Moyang Wang, and Christopher Batten. Asymmetry-aware work-stealing runtimes. *ACM SIGARCH Computer Architecture News*, 44(3):40–52, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tan:2010:CFF

[TWC+10] Zhangxi Tan, Andrew Waterman, Henry Cook, Sarah Bird, Krste Asanović, and David Patterson. A case for FAME: FPGA architecture model execution. *ACM SIGARCH Computer Architecture News*, 38(3):290–301, June 2010.

CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tiwari:2009:CIF

[TWM+09] Mohit Tiwari, Hassan M. G. Wassel, Bita Mazloom, Shashidhar Mysore, Frederic T. Chong, and Timothy Sherwood. Complete information flow tracking from the gates up. *ACM SIGARCH Computer Architecture News*, 37 (1):109–120, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tucek:2009:EOV

[TXZ09] Joseph Tucek, Weiwei Xiong, and Yuanyuan Zhou. Efficient online validation with delta execution. *ACM SIGARCH Computer Architecture News*, 37(1):193–204, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Takahashi:1986:NSS

[TYNM86] K. Takahashi, H. Yamada, H. Nagai, and K. Matsumi. A new string search hardware architecture for VLSI. *ACM SIGARCH Computer Architecture News*, 14(2):20–27, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Talcott:1994:IUB

[TYS+94] A. R. Talcott, W. Yamamoto, M. J. Serrano, R. C. Wood, and M. Nemirovsky. The impact of unresolved branches on branch prediction scheme performance. *ACM SIGARCH Computer Architecture News*, 22(2):12–21, April 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Takamaeda-Yamazaki:2011:FBS

[TYSSK11] Shinya Takamaeda-Yamazaki, Ryosuke Sasakawa, Yoshito Sakaguchi, and Kenji Kise. An FPGA-based scalable simulation accelerator for tile architectures. *ACM SIGARCH Computer Architecture News*, 39(4):38–43, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tzeng:1985:FTS

[TYZ85] Nian-Feng Tzeng, Pen-Chung Yew, and Chun-Qi Zhu. A fault-tolerant scheme for multistage interconnection networks. *ACM SIGARCH Computer Architecture News*, 13(3):368–375, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tang:1990:CTD

[TYZ90] Peiyi Tang, Pen-Chung Yew, and Chuan-Qi Zhu. Compiler techniques for data synchronization in nested parallel loops. *ACM SIGARCH Computer Architecture News*, 18(3b):177–186, September

1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tzeng:1990:AVH

[Tze90] Nian-Feng Tzeng. Analysis of a variant hypercube topology. *ACM SIGARCH Computer Architecture News*, 18 (3b):60–70, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Tseng:2013:NNE

[TZH+13] Kuo-Kun Tseng, Fu-Fu Zeng, Huang-Nan Huang, Yiming Liu, Jeng-Shyang Pan, W. H. Ip, and C. H. Wu. A new non-exact Aho–Corasick framework for ECG classification. *ACM SIGARCH Computer Architecture News*, 41 (2):41–46, May 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Tseng:2016:MCA

[TZZ+16] Hung-Wei Tseng, Qianchen Zhao, Yuxiao Zhou, Mark Gahagan, and Steven Swanson. Morpheus: creating application objects efficiently for heterogeneous computing. *ACM SIGARCH Computer Architecture News*, 44 (3):53–65, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

ulAlam:2016:PRS

[uAM16] Mohammad Mejbah ul Alam and Abdullah Muzahid. Production-run software failure diagnosis via adaptive communication tracking. *ACM SIGARCH Computer Architecture News*, 44(3):354–366, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ungar:1984:ASS

[UBF+84] David Ungar, Ricki Blau, Peter Foley, Dain Samples, and David Patterson. Architecture of SOAR: Smalltalk on a RISC. *ACM SIGARCH Computer Architecture News*, 12(3):188–197, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Unwala:1994:SMP

[UC94] Ishaq H. Unwala and Harvey G. Cragon. A study of MIPS programs. *ACM SIGARCH Computer Architecture News*, 22(5):30–40, December 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ung:2001:OHP

[UC01] David Ung and Cristina Cifuentes. Optimising hot paths in a dynamic binary translator. *ACM SIGARCH Computer Architecture News*, 29(1):55–65, March 2001. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Uchida:1983:IMS

[Uch83] Shunichi Uchida. Inference machine: From sequential to parallel. *ACM SIGARCH Computer Architecture News*, 11(3):410–416, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ullah:1993:MIP

[UH93] Nasr Ullah and Matt Holle. The MC88110 implementation of precise exceptions in a superscalar architecture. *ACM SIGARCH Computer Architecture News*, 21(1):15–25, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uht:1993:EMIa

[Uht93a] Augustus K. Uht. Extraction of massive instruction level parallelism. *ACM SIGARCH Computer Architecture News*, 21(1):12–14, March 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uht:1993:EMIb

[Uht93b] Augustus K. Uht. Extraction of massive instruction level parallelism. *ACM SIGARCH Computer Architecture News*, 21(3):5–12, June 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uht:2002:DEE

[Uht02] Augustus K. Uht. Disjoint Eager Execution: what it is /what it is not. *ACM SIGARCH Computer Architecture News*, 30(1):12–14, March 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uht:1992:DPI

[UJ92] Augustus K. Uht and Darin B. Johnson. Data path issues in a highly concurrent machine (abstract). *ACM SIGARCH Computer Architecture News*, 20(2):431, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ulmann:1995:ESB

[Ulm95] B. Ulmann. oμ-EP-1: a simple 32-bit architecture. *ACM SIGARCH Computer Architecture News*, 23(3):19–24, June 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ulmann:1997:NEP

[Ulm97] B. Ulmann. NICE: an elegant and powerful 32-bit architecture. *ACM SIGARCH Computer Architecture News*, 25(4):30–35, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ulmann:1998:ILE

[Ulm98] B. Ulmann. Instruction looping, an extension to conditional execution. *ACM*

SIGARCH Computer Architecture News, 26(1):3–4, March 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Udipi:2011:CMC

[UMB+11] Aniruddha N. Udipi, Naveen Muralimanohar, Rajeev Balasubramonian, Al Davis, and Norman P. Jouppi. Combining memory and a controller with photonics through 3D-stacking to enable scalable and energy-efficient systems. *ACM SIGARCH Computer Architecture News*, 39 (3):425–436, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Udipi:2012:LEL

[UMB+12] Aniruddha N. Udipi, Naveen Muralimanohar, Rajeev Balsubramonian, Al Davis, and Norman P. Jouppi. LOT-ECC: localized and tiered reliability mechanisms for commodity memory systems. *ACM SIGARCH Computer Architecture News*, 40(3): 285–296, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Udipi:2010:RDD

[UMC+10] Aniruddha N. Udipi, Naveen Muralimanohar, Niladrish Chatterjee, Rajeev Balasubramonian, Al Davis, and Norman P. Jouppi. Rethinking DRAM design and organization for energy-constrained multi-cores. *ACM SIGARCH Computer Architecture News*, 38(3):175–186, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uluski:2005:CAW

[UMK05] Derek Uluski, Micha Moffie, and David Kaeli. Characterizing antivirus workload execution. *ACM SIGARCH Computer Architecture News*, 33(1):90–98, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Uhlig:1995:IFC

[UNM+95] Richard Uhlig, David Nagle, Trevor Mudge, Stuart Sechrest, and Joel Emer. Instruction fetching: coping with code bloat. *ACM SIGARCH Computer Architecture News*, 23(2):345–356, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Umeyama:1983:PEM

[UT83] Shinji Umeyama and Koichiro Tamura. A parallel execution model of logic programs. *ACM SIGARCH Computer Architecture News*, 11(3):349–355, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Upasani:2012:SED

[UVG12] Gaurang Upasani, Xavier Vera, and Antonio González. Setting an error detection infrastructure with low cost acoustic wave detectors. *ACM SIGARCH Computer Architecture News*, 40(3):333–343, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Upasani:2014:ACD

[UVG14] Gaurang Upasani, Xavier Vera, and Antonio González. Avoiding core's DUE & SDC via acoustic wave detectors and tailored error containment and recovery. *ACM SIGARCH Computer Architecture News*, 42(3):37–48, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ungerer:1991:MLP

[UZ91] Theo Ungerer and Eberhard Zehendner. A multilevel parallelism architecture. *ACM SIGARCH Computer Architecture News*, 19(4):86–93, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Unger:2000:CCA

[UZU00] A. Unger, E. Zehendner, and Th. Ungerer. A combined compiler and architecture technique to control multithreaded execution of branches and loop iterations. *ACM SIGARCH Computer Architecture News*, 28(1):53–61, March 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

VanOost:1981:MPS

[Van81] E. M. J. C. Van Oost. Multiprocessor system description and simulation using structured multi-programming languages. *ACM SIGARCH Computer Architecture News*, 9(2):16–32, April 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Voskuilen:2010:TEA

[VAV10] Gwendolyn Voskuilen, Faraz Ahmad, and T. N. Vijaykumar. Timetraveler: exploiting acyclic races for optimizing memory race recording. *ACM SIGARCH Computer Architecture News*, 38(3):198–209, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vassiliadis:1992:ASO

[VBE92] Stamatis Vassiliadis, Bart Blaner, and Richard J. Eickemeyer. On the attributes of the SCISM organization. *ACM SIGARCH Computer Architecture News*, 20(4):44–53, September 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkateswaran:2005:FTB

[VBS05] N. Venkateswaran, S. Balaji, and V. Sridhar. Fault tolerant bus architecture for deep submicron based processors. *ACM SIGARCH Computer Architecture News*, 33(1):148–155, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vilanova:2014:CPS

[VBYN+14] Lluïs Vilanova, Muli Ben-Yehuda, Nacho Navarro, Yoav Etsion, and Mateo Valero. CODOMs: protecting software with code-centric memory domains. *ACM SIGARCH Computer Architecture News*, 42(3):469–480, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Vaughan:1972:CAS

[VC72] R. F. Vaughan and R. A. Collins. On computer architecture, software portability & microprogramming. *ACM SIGARCH Computer Architecture News*, 1(4):14–15, October 1972. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vijaykumar:2004:WDP

[VC04] T. N. Vijaykumar and Zeshan Chishti. Wire delay is not a problem for SMT (in the near future). *ACM SIGARCH Computer Architecture News*, 32(2):40, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Valamehr:2012:IRM

[VCK+12] Jonathan Valamehr, Melissa Chase, Seny Kamara, Andrew Putnam, Dan Shumow, Vinod Vaikuntanathan, and Timothy Sherwood. Inspection resistant memory: architectural support for security from physical examination. *ACM SIGARCH Computer Architecture News*, 40 (3):130–141, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

vanderHouwen:1990:POS

[vdHS90] P. J. van der Houwen and B. P. Sommeijer. Parallel ODE solvers. *ACM SIGARCH Computer Architecture News*, 18(3b):71–81, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

vandeSnepscheut:1979:INP

[vdSS79] Jan L. A. van de Snepscheut and Gert A. Slavenburg. Introducing the notion of processes to hardware. *ACM SIGARCH Computer Architecture News*, 7(7): 13–23, April 1979. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

VanErtvelde:2008:DPA

[VE08] Luk Van Ertvelde and Lieven Eeckhout. Dispersing proprietary applications as benchmarks through code mutation. *ACM SIGARCH Computer Architecture News*, 36(1):201–210, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Voitsechov:2014:SGM

[VE14] Dani Voitsechov and Yoav Etsion. Single-graph multiple flows: energy efficient design alternative for GPGPUs. *ACM SIGARCH Computer Architecture News*, 42 (3):205–216, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

vonEicken:1992:AMM

[vECGS92] Thorsten von Eicken, David E. Culler, Seth Copen Goldstein, and Klaus Erik Schauser. Active messages: a mechanism for integrated communication and computation. *ACM SIGARCH Computer Architecture News*, 20(2):256–266, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

vonEicken:1998:AMM

[vECGS98] Thorsten von Eicken, David E. Culler, Seth Copen Goldstein, and Klaus Erik Schauser. Active messages: a mechanism for integrating communication and computation. In ACM [ACM98a], pages 430–440. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

vonEicken:1998:RAM

[vECSG98] Thorsten von Eicken, David E. Culler, Klaus Erik Schauser, and Seth Copen Goldstein. Retrospective: Active messages: a mechanism for integrating computation and communication. In ACM [ACM98a], pages 83–84. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Vedder:1985:HDF

[VF85] Rex Vedder and Dennis Finn. The Hughes Data Flow Multiprocessor: architecture for efficient signal and data processing. *ACM SIGARCH Computer Architecture News*, 13(3):324–332, June 1985. CODEN CANED2. ISSN

0163-5964 (ACM), 0884-7495 (IEEE).

Vanderbauwhede:2013:HCF

[VFCM13] Wim Vanderbauwhede, Anton Frolov, Sai Rahul Chalamalasetti, and Martin Margala. A hybrid CPU–FPGA system for high throughput (10Gb/s) streaming document classification. *ACM SIGARCH Computer Architecture News*, 41(5):53–58, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

VanMeter:1997:RCL

[VFHD97] Rodney Van Meter, Greg Finn, Steve Hotz, and Dave Dyer. Response to the collapsed LAN. *ACM SIGARCH Computer Architecture News*, 25(4):1–12, September 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkateswaran:2004:MPN

[VFK+04] N. Venkateswaran, Waran Research Foundation, Aditya Krishnan, S. Niranjan Kumar, Arrvindh Shriraman, and Srinivas Sridharan. Memory in processor: a novel design paradigm for supercomputing architectures. *ACM SIGARCH Computer Architecture News*, 32(3):19–26, June 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vlachos:2010:PEA

[VGK+10] Evangelos Vlachos, Michelle L. Goodstein, Michael A. Kozuch, Shimin Chen, Babak Falsafi, Phillip B. Gibbons, and Todd C. Mowry. ParaLog: enabling and accelerating online parallel monitoring of multithreaded applications. *ACM SIGARCH Computer Architecture News*, 38(1):271–284, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Valero-Garcia:1989:SHA

[VGNLV89] M. Valero-Garcia, J. J. Navarro, J. M. Llaberia, and M. Valero. Systematic hardware adaptation of systolic algorithms. *ACM SIGARCH Computer Architecture News*, 17(3):96–104, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Verdu:2005:ITA

[VGNV05] Javier Verdú, Jorge García, Mario Nemirovsky, and Mateo Valero. The impact of traffic aggregation on the memory performance of networking applications. *ACM SIGARCH Computer Architecture News*, 33(3):57–62, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vrsalovic:1985:IPD

[VGSS85] Dalibor Vrsalovic, Edward F. Gehringer, Zary Z. Segall, and

Daniel P. Siewiorek. The influence of parallel decomposition strategies on the performance of multiprocessor systems. *ACM SIGARCH Computer Architecture News*, 13(3):396–405, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vora:2017:KFA

[VGX17] Keval Vora, Rajiv Gupta, and Guoqing Xu. KickStarter: Fast and accurate computations on streaming graphs via trimmed approximations. *ACM SIGARCH Computer Architecture News*, 45(1):237–251, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Vranesic:1973:DFV

[VHL73] Z. G. Vranesic, V. C. Hamacher, and Y. Y. Leung. Design of a fully variable-length structured minicomputer. *ACM SIGARCH Computer Architecture News*, 2 (4):251–255, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vanderleest:1994:MBC

[VI94] Steven H. Vanderleest and Ravishankar K. Iyer. Measurement of I/O bus contention and correlation among heterogeneous device types in a single-bus multiprocessor system. *ACM SIGARCH Computer Architecture News*, 22 (4):17–22, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vachharajani:2005:CMP

[VIA+05] Neil Vachharajani, Matthew Iyer, Chinmay Ashok, Manish Vachharajani, David I. August, and Daniel Connors. Chip multi-processor scalability for single-threaded applications. *ACM SIGARCH Computer Architecture News*, 33(4):44–53, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

vonIssendorff:1980:ANF

[vIG80] H. von Issendorff and W. Grünewald. An adaptable network for functional distributed systems. *ACM SIGARCH Computer Architecture News*, 8 (3):196–201, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vineberg:1977:ICS

[Vin77] Maniel Vineberg. Implementation of character string pattern matching on a multiprocessor. *ACM SIGARCH Computer Architecture News*, 6(2): 1–7, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vissers:1976:IDA

[Vis76] Chris A. Vissers. Interface, a dispersed architecture.

ACM SIGARCH Computer Architecture News, 4(4):98–104, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Varma:1995:DAD

[VJ95] Anujan Varma and Quinn Jacobson. Destage algorithms for disk arrays with non-volatile caches. *ACM SIGARCH Computer Architecture News*, 23(2):83–95, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

VanCraeynest:2012:SHM

[VJE+12] Kenzo Van Craeynest, Aamer Jaleel, Lieven Eeckhout, Paolo Narvaez, and Joel Emer. Scheduling heterogeneous multi-cores through Performance Impact Estimation (PIE). *ACM SIGARCH Computer Architecture News*, 40(3):213–224, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Vajapeyam:1999:DVM

[VJM99] Sriram Vajapeyam, P. J. Joseph, and Tulika Mitra. Dynamic vectorization: a mechanism for exploiting far-flung ILP in ordinary programs. *ACM SIGARCH Computer Architecture News*, 27(2):16–27, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vijaykrishnan:2000:EDI

[VKI+00] N. Vijaykrishnan, M. Kandemir, M. J. Irwin, H. S. Kim, and W. Ye. Energy-driven integrated hardware-software optimizations using SimplePower. *ACM SIGARCH Computer Architecture News*, 28(2):95–106, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Valero:1992:INS

[VLL+92] Mateo Valero, Tomás Lang, José M. Llabería, Montse Peiron, Eduard Ayguadé, and Juan J. Navarra. Increasing the number of strides for conflict-free vector access. *ACM SIGARCH Computer Architecture News*, 20(2):372–381, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Veeraraghavan:2011:DPS

[VLW+11] Kaushik Veeraraghavan, Dongyoon Lee, Benjamin Wester, Jessica Ouyang, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. DoublePlay: parallelizing sequential logging and replay. *ACM SIGARCH Computer Architecture News*, 39(1):15–26, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vernon:1988:AEP

[VLZ88] M. K. Vernon, E. D. Lazowska, and J. Zahorjan. An accurate and efficient performance analysis technique for multiprocessor snooping cache-consistency protocols. *ACM SIGARCH Computer Architecture News*, 16(2):308–315, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vernon:1988:DRR

[VM88] M. K. Vernon and U. Manber. Distributed round-robin and first-come first-serve protocols and their applications to multiprocessor bus arbitration. *ACM SIGARCH Computer Architecture News*, 16(2):269–279, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vajapeyam:1997:ISI

[VM97] Sriram Vajapeyam and Tulika Mitra. Improving superscalar instruction dispatch and issue by exploiting dynamic code sequences. *ACM SIGARCH Computer Architecture News*, 25(2):1–12, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vasic:2012:DAR

[VNM+12] Nedeljko Vasić, Dejan Novaković, Svetozar Miucin, Dejan Kostić, and Ricardo Bianchini. DejaVu: accelerating resource allocation in virtualized environments. *ACM SIGARCH Computer Architecture News*, 40(1):423–436, March 2012. ASPLOS '12 conference proceedings.

VanMeter:2006:DAQ

[VNMI06] Rodney Van Meter, Kae Nemoto, W. J. Munro, and Kohei M. Itoh. Distributed arithmetic on a quantum multicomputer. *ACM SIGARCH Computer Architecture News*, 34(2):354–365, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Viennot:2013:TMR

[VNN13] Nicolas Viennot, Siddharth Nair, and Jason Nieh. Transparent mutable replay for multicore debugging and patch validation. *ACM SIGARCH Computer Architecture News*, 41(1):127–138, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Vegdahl:1989:RES

[VP89] Steven R. Vegdahl and Uwe F. Pleban. The runtime environment for Scheme, a Scheme implementation on the 88000. *ACM SIGARCH Computer Architecture News*, 17(2):172–182, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vijaykumar:2002:TFR

[VPC02] T. N. Vijaykumar, Irith Pomeranz, and Karl Cheng. Transient-fault recovery using simultaneous multithreading. *ACM SIGARCH Computer Architecture News*, 30 (2):87–98, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

vonPraun:2006:CMO

[vPCCR06] Christoph von Praun, Harold W. Cain, Jong-Deok Choi, and Kyung Dong Ryu. Conditional memory ordering. *ACM SIGARCH Computer Architecture News*, 34(2):41–52, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vahid:2001:PCP

[VPS01] Frank Vahid, Rilesh Patel, and Greg Stitt. Propagating constants past software to hardware peripherals in fixed-application embedded systems. *ACM SIGARCH Computer Architecture News*, 29(5):25–30, December 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vaucher:1973:HLC

[VR73] Jean Vaucher and Christian Rey. A hardware laboratory for computer architecture research. *ACM SIGARCH Computer Architecture News*, 2(4):171–175, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Varma:1987:RMS

[VR87] A. Varma and C. S. Raghavendra. Rearrangeability of multistage shuffle/exchange networks. *ACM SIGARCH Computer Architecture News*, 15 (2):154–162, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vranesic:1978:BRR

[Vra78] Z. G. Vranesic. Book reviews: Review of *Content Addressable Parallel Processors* by Caxton C. Foster, Van Nostrand Reinhold Co. 1976. *ACM SIGARCH Computer Architecture News*, 7(1): 24, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkataramani:2017:SSC

[VRB+17] Swagath Venkataramani, Ashish Ranjan, Subarno Banerjee, Dipankar Das, Sasikanth Avancha, Ashok Jagannathan, Ajaya Durg, Dheemanth Nagaraj, Bharat Kaul, Pradeep Dubey, and Anand Raghunathan. ScaleDeep: a scalable compute architecture for learning and evaluating deep networks. *ACM SIGARCH Computer Architecture News*, 45(2):13–26, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Venkatesan:2014:SST

[VRV+14] Rangharajan Venkatesan, Shankar Ganesh Ramasubramanian, Swagath

Venkataramani, Kaushik Roy, and Anand Raghunathan. STAG: spintronic-tape architecture for GPGPU cache hierarchies. *ACM SIGARCH Computer Architecture News*, 42(3):253–264, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Varma:1992:CPS

[VS92] Anujan Varma and Gunjan Sinha. A class of prefetch schemes for on-chip data caches. *ACM SIGARCH Computer Architecture News*, 20(2):433, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkatesh:2010:CCR

[VSG+10] Ganesh Venkatesh, Jack Sampson, Nathan Goulding, Saturnino Garcia, Vladyslav Bryksin, Jose Lugo-Martinez, Steven Swanson, and Michael Bedford Taylor. Conservation cores: reducing the energy of mature computations. *ACM SIGARCH Computer Architecture News*, 38(1):205–218, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vajapeyam:1991:ESC

[VSH91] Sriram Vajapeyam, Gurindar S. Sohi, and Wei-Chung Hsu. An empirical study of the CRAY Y-MP processor using the Perfect Club benchmarks. *ACM SIGARCH Computer Architecture News*, 19(3):170–179, May 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkateswaran:2007:FGSa

[VSM+07a] N. Venkateswaran, Deepak Srinivasan, Madhavan Manivannan, T. P. Ramnath Sai Sagar, Shyamsundar Gopalakrishnan, VinothKrishnan Elangovan, Karthik Chandrasekar, Prem Kumar Ramesh, Viswanath Venkatesan, Arvindakshan Babu, and Sudharshan. Future generation supercomputers I: a paradigm for node architecture. *ACM SIGARCH Computer Architecture News*, 35(5):49–60, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkateswaran:2007:FGSb

[VSM+07b] N. Venkateswaran, Deepak Srinivasan, Madhavan Manivannan, T. P. Ramnath Sai Sagar, Shyamsundar Gopalakrishnan, VinothKrishnan Elangovan, Arvind M., Prem Kumar Ramesh, Karthik Ganesan, Viswanath Krishnamurthy, and Sivaramakrishnan. Future generation supercomputers II: a paradigm for cluster architecture. *ACM SIGARCH Computer Architecture News*, 35(5):61–70, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vantrease:2008:CSI

[VSM+08] Dana Vantrease, Robert Schreiber, Matteo Monchiero, Moray McLaren, Norman P. Jouppi, Marco Fiorentino, Al Davis, Nathan Binkert, Raymond G. Beausoleil, and Jung Ho Ahn. Corona: System implications of emerging nanophotonic technology. *ACM SIGARCH Computer Architecture News*, 36(3):153–164, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Vintan:2003:ABP

[VSMF03] Lucian N. Vintan, Marius Sbera, Ioan Z. Mihu, and Adrian Florea. An alternative to branch prediction: pre-computed branches. *ACM SIGARCH Computer Architecture News*, 31(3):20–29, June 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkat:2016:HHI

[VSST16] Ashish Venkat, Sriskanda Shamasunder, Hovav Shacham, and Dean M. Tullsen. HIPStR: Heterogeneous-ISA program state relocation. *ACM SIGARCH Computer Architecture News*, 44(2):727–741, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Vaidya:2013:SDO

[VSW+13] Aniruddha S. Vaidya, Anahita Shayesteh, Dong Hyuk Woo, Roy Saharoy, and Mani Azimi. SIMD divergence optimization through intra-warp compaction. *ACM SIGARCH Computer Architecture News*, 41(3):368–379, June 2013. ICSA '13 conference proceedings.

vanTilborg:1988:IDC

[vT88] Andre M. van Tilborg. Instrumentation for distributed computing systems. *ACM SIGARCH Computer Architecture News*, 16(5):20–25, December 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

vanTilborg:1989:PFD

[vT89] A. M. van Tilborg. Panel on future directions in parallel computer architecture. *ACM SIGARCH Computer Architecture News*, 17(4):3–53, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Venkat:2014:HID

[VT14] Ashish Venkat and Dean M. Tullsen. Harnessing ISA diversity: design of a heterogeneous-ISA chip multiprocessor. *ACM SIGARCH Computer Architecture News*, 42(3):121–132, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Vora:2017:CCR

[VTGH17] Keval Vora, Chen Tian, Rajiv Gupta, and Ziang Hu. CoRAL: Confined recovery in distributed asynchronous graph processing. *ACM SIGARCH Computer Architecture News*, 45(1):223–236, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Volos:2011:MLP

[VTS11] Haris Volos, Andres Jaan Tack, and Michael M. Swift. Mnemosyne: lightweight persistent memory. *ACM SIGARCH Computer Architecture News*, 39(1):91–104, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Volos:2012:ATM

[VTSL12] Haris Volos, Andres Jaan Tack, Michael M. Swift, and Shan Lu. Applying transactional memory to concurrency bugs. *ACM SIGARCH Computer Architecture News*, 40 (1):211–222, March 2012. ASPLOS '12 conference proceedings.

Voskuilen:2014:FCP

[VV14a] Gwendolyn Voskuilen and T. N. Vijaykumar. Fractal++: closing the performance gap between fractal and conventional coherence. *ACM SIGARCH Computer Architecture News*, 42 (3):409–420, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Voskuilen:2014:HPF

[VV14b] Gwendolyn Voskuilen and T. N. Vijaykumar. High-performance fractal coherence. *ACM SIGARCH Computer Architecture News*, 42 (1):701–714, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Veidenbaum:1998:RCS

[VYK+98] A. Veidenbaum, P.-C. Yew, D. J. Kuck, C. D. Polychronopoulos, D. H. Padua, E. S. Davidson, and K. Gallivan. Retrospective: The Cedar system. In ACM [ACM98a], pages 89–91. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Waterland:2014:AAS

[WAA+14] Amos Waterland, Elaine Angelino, Ryan P. Adams, Jonathan Appavoo, and Margo Seltzer. ASC: automatically scalable computation. *ACM SIGARCH Computer*

Architecture News, 42(1):575–590, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wilkerson:2010:RCP

[WAC+10] Chris Wilkerson, Alaa R. Alameldeen, Zeshan Chishti, Wei Wu, Dinesh Somasekhar, and Shih lien Lu. Reducing cache power with low-cost, multi-bit error-correcting codes. *ACM SIGARCH Computer Architecture News*, 38 (3):83–93, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wenisch:2007:MSW

[WAFM07] Thomas F. Wenisch, Anastasia Ailamaki, Babak Falsafi, and Andreas Moshovos. Mechanisms for store-wait-free multiprocessors. *ACM SIGARCH Computer Architecture News*, 35(2):266–277, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wagner:1983:BVM

[Wag83] Robert A. Wagner. The Boolean Vector Machine [BVM]. *ACM SIGARCH Computer Architecture News*, 11(3):59–66, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wah:1983:CSD

[Wah83] Benjamin W. Wah. A comparative study of distributed resource sharing on multiprocessors. *ACM SIGARCH Computer Architecture News*, 11(3):301–308, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wajda:1992:SSP

[Waj92] Eligiusz Wajda. SPIRE: streaming processing with instructions release element. *ACM SIGARCH Computer Architecture News*, 20(1):45–54, March 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wakerly:1980:PED

[Wak80] John F. Wakerly. Pascal extensions for describing computer instruction sets. *ACM SIGARCH Computer Architecture News*, 8(7):15–23, October 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wakerly:1981:BRR

[Wak81] John Wakerly. Book review: Review of 'The Computers that Saved Metropolis, by DC Comics and Radio Shack', July 1980. *ACM SIGARCH Computer Architecture News*, 9(2):33–34, April 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wall:1991:LIL

[Wal91] David W. Wall. Limits of instruction-level parallelism. *ACM SIGARCH Computer Architecture News*, 19(2):176–188, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:1993:NDH

[Wan93] Dajin Wang. A note on "Diagnosabilities of hypercubes under the pessimistic one-step diagnosis strategy". *ACM SIGARCH Computer Architecture News*, 21(5):71–78, December 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2001:MAH

[Wan01] Frank Wang. A modified architecture for high-density MRAM. *ACM SIGARCH Computer Architecture News*, 29(1):16–22, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weisse:2017:RLC

[WBA17] Ofir Weisse, Valeria Bertacco, and Todd Austin. Regaining lost cycles with HotCalls: a fast interface for SGX secure enclaves. *ACM SIGARCH Computer Architecture News*, 45(2):81–93, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wu:2013:NBD

[WBKR13] Lisa Wu, Raymond J. Barker, Martha A. Kim, and Kenneth A. Ross. Navigating big data with high-throughput, energy-efficient data partitioning. *ACM SIGARCH Computer Architecture News*, 41 (3):249–260, June 2013. ICSA '13 conference proceedings.

Wang:1989:OPT

[WBL89] W. H. Wang, J.-L. Baer, and H. M. Levy. Organization and performance of a two-level virtual-real cache hierarchy. *ACM SIGARCH Computer Architecture News*, 17(3):140–148, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2003:GRP

[WBM+03] Zhenlin Wang, Doug Burger, Kathryn S. McKinley, Steven K. Reinhardt, and Charles C. Weems. Guided region prefetching: a cooperative hardware/software approach. *ACM SIGARCH Computer Architecture News*, 31(2):388–398, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wolfe:1988:WDH

[WBS+88] A. Wolfe, M. Breternitz, Jr., C. Stephens, A. L. Ting, D. B. Kirk, R. P. Bianchini, Jr., and J. P. Shen. The white dwarf: a high-performance application-specific processor. *ACM*

SIGARCH Computer Architecture News, 16(2):212–222, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Witchel:2002:MMP

[WCA02] Emmett Witchel, Josh Cates, and Krste Asanović. Mondrian memory protection. *ACM SIGARCH Computer Architecture News*, 30(5):304–316, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wood:1993:MCS

[WCF+93] David A. Wood, Satish Chandra, Babak Falsafi, Mark D. Hill, James R. Larus, Alvin R. Lebeck, James C. Lewis, Shubhendu S. Mukherjee, Subbarao Palacharla, and Steven K. Reinhardt. Mechanisms for cooperative shared memory. *ACM SIGARCH Computer Architecture News*, 21(2):156–167, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wu:2001:BER

[WCF01] Youfeng Wu, Dong-Yuan Chen, and Jesse Fang. Better exploration of region-level value locality with integrated computation reuse and value prediction. *ACM SIGARCH Computer Architecture News*, 29(2):98–108, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wood:2014:LLD

[WCG14] Benjamin P. Wood, Luis Ceze, and Dan Grossman. Low-level detection of language-level data races with LARD. *ACM SIGARCH Computer Architecture News*, 42(1):671–686, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wen:2017:REV

[WCL17] Shasha Wen, Milind Chabbi, and Xu Liu. REDSPY: Exploring value locality in software. *ACM SIGARCH Computer Architecture News*, 45 (1):47–61, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wells:2008:AIF

[WCS08] Philip M. Wells, Koushik Chakraborty, and Gurindar S. Sohi. Adapting to intermittent faults in multicore systems. *ACM SIGARCH Computer Architecture News*, 36(1):255–264, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wells:2009:MMM

[WCS09] Philip M. Wells, Koushik Chakraborty, and Gurindar S. Sohi. Mixed-mode multicore reliability. *ACM SIGARCH Computer Architecture News*, 37(1):169–180, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wallace:1998:TMP

[WCT98] Steven Wallace, Brad Calder, and Dean M. Tullsen. Threaded multiple path execution. *ACM SIGARCH Computer Architecture News*, 26(3):238–249, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2004:HTV

[WCW+04] Perry H. Wang, Jamison D. Collins, Hong Wang, Dongkeun Kim, Bill Greene, Kai-Ming Chan, Aamir B. Yunus, Terry Sych, Stephen F. Moore, and John P. Shen. Helper threads via virtual multithreading on an experimental Itanium-2 processor-based platform. *ACM SIGARCH Computer Architecture News*, 32(5):144–155, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2017:XCE

[WCX17] Aosen Wang, Lizhong Chen, and Wenyao Xu. XPro: a cross-end processing architecture for data analytics in wearables. *ACM SIGARCH Computer Architecture News*, 45 (2):69–80, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Weinsberg:2008:TFC

[WDA+08] Yaron Weinsberg, Danny Dolev, Tal Anker, Muli Ben-Yehuda, and Pete Wyckoff. Tapping into the fountain of CPUs: on operating system support for programmable devices. *ACM SIGARCH Computer Architecture News*, 36(1):179–188, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wester:2013:PDR

[WDC+13] Benjamin Wester, David Devecsery, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. Parallelizing data race detection. *ACM SIGARCH Computer Architecture News*, 41(1):27–38, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wu:2016:DFD

[WDG+16] Qiang Wu, Qingyuan Deng, Lakshmi Ganesh, Chang-Hong Hsu, Yun Jin, Sanjeev Kumar, Bin Li, Justin Meza, and Yee Jiun Song. Dynamo: facebook's data center-wide power management system. *ACM SIGARCH Computer Architecture News*, 44 (3):469–480, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Watanabe:2010:WWD

[WDW10] Yasuko Watanabe, John D. Davis, and David A. Wood. WiDGET: Wisconsin Decoupled Grid Execution Tiles. *ACM SIGARCH Computer Architecture News*, 38(3):2–13, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wann:1974:CCS

[WE74] Donald F. Wann and Robert A. Ellis. Conjoined computer systems: an architecture for laboratory data processing and instrument control. *ACM SIGARCH Computer Architecture News*, 3(4):170–175, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wood:1986:CAT

[WEG+86] D. A. Wood, S. J. Eggers, G. Gibson, M. D. Hill, and J. M. Pendleton. An in-cache address translation mechanism. *ACM SIGARCH Computer Architecture News*, 14(2):358–365, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weiss:1989:ASS

[Wei89] S. Weiss. An aperiodic storage scheme to reduce memory conflicts in vector processors. *ACM SIGARCH Computer Architecture News*, 17(3):380–386, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weicker:1997:USB

[Wei97] Reinhold Weicker. On the use of SPEC benchmarks in computer architecture research. *ACM SIGARCH Computer Architecture News*, 25(1):19–22, March 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Welch:1976:IDO

[Wel76] Terry A. Welch. An investigation of descriptor oriented architecture. *ACM SIGARCH Computer Architecture News*, 4(4):141–146, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weaver:2004:TRS

[WEMR04] Christopher Weaver, Joel Emer, Shubhendu S. Mukherjee, and Steven K. Reinhardt. Techniques to reduce the soft error rate of a high-performance microprocessor. *ACM SIGARCH Computer Architecture News*, 32 (2):264, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wong:1987:PAD

[WF87] K. Wong and M. A. Franklin. Performance analysis and design of a logic simulation machine. *ACM SIGARCH Computer Architecture News*, 15 (2):46–55, 1987. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weber:1989:ACI

[WG89a] W. Weber and A. Gupta. Analysis of cache invalidation patterns in multiprocessors. *ACM SIGARCH Computer Architecture News*, 17(2):243–256, April 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weber:1989:EBM

[WG89b] W.-D. Weber and A. Gupta. Exploring the benefits of multiple hardware contexts in a multiprocessor architecture: preliminary results. *ACM SIGARCH Computer Architecture News*, 17(3):273–280, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkerson:2008:TCC

[WGA+08] Chris Wilkerson, Hongliang Gao, Alaa R. Alameldeen, Zeshan Chishti, Muhammad Khellah, and Shih-Lien Lu. Trading off cache capacity for reliability to enable low voltage operation. *ACM SIGARCH Computer Architecture News*, 36(3):203–214, June 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weber:1997:MIA

[WGH+97] Wolf-Dietrich Weber, Stephen Gold, Pat Helland, Takeshi Shimizu, Thomas Wicki, and Winfried Wilcke. The Mercury Interconnect Architecture: a cost-effective infrastructure for high-performance servers. *ACM SIGARCH Computer Architecture News*, 25(2):98–107, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wassel:2013:SLL

[WGO+13] Hassan M. G. Wassel, Ying Gao, Jason K. Oberg, Ted Huffmire, Ryan Kastner, Frederic T. Chong, and Timothy Sherwood. SurfNoC: a low latency and provably non-interfering approach to secure networks-on-chip. *ACM SIGARCH Computer Architecture News*, 41(3):583–594, June 2013. ICSA '13 conference proceedings.

Wang:2014:UBP

[WGS+14] Di Wang, Sriram Govindan, Anand Sivasubramaniam, Aman Kansal, Jie Liu, and Badriddine Khessib. Underprovisioning backup power infrastructure for datacenters. *ACM SIGARCH Computer Architecture News*, 42(1):177–192, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wang:2005:DMS

[WGT+05] David Wang, Brinda Ganesh, Nuengwong Tuaycharoen, Kathleen Baynes, Aamer Jaleel, and Bruce Jacob. DRAMsim: a memory system simulator. *ACM SIGARCH Computer Architecture News*, 33(4):100–107, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:1997:CLS

[WH97] Maurice Wilkes and Andrew Hopper. The collapsed LAN: a solution to a bandwidth problem? *ACM SIGARCH Computer Architecture News*, 25 (3):1–5, June 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weicker:2007:SPR

[WH07] Reinhold P. Weicker and John L. Henning. Subroutine profiling results for the CPU2006 benchmarks. *ACM SIGARCH Computer Architecture News*, 35(1):102–111, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Walcott:2007:DPA

[WHG07] Kristen R. Walcott, Greg Humphreys, and Sudhanva Gurumurthi. Dynamic prediction of architectural vulnerability from microarchitectural state. *ACM SIGARCH Computer Architecture News*, 35(2):516–527, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Whiteside:1978:BRR

[Whi78] A. E. Whiteside. Book reviews: Review of *The Architecture of Concurrent Programs* by Per Brinch Hansen, Prentice-Hall 1977. *ACM SIGARCH Computer Architecture News*, 6(6):32, February 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2002:NAM

[WHM02] Frank Wang, Na Helian, and Farhi Marir. A novel associative memory architecture for quick matching. *ACM SIGARCH Computer Architecture News*, 30(3):15–16, June 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2017:GSM

[WHZ+17] Kai Wang, Aftab Hussain, Zhiqiang Zuo, Guoqing Xu, and Ardalan Amiri Sani. Graspan: a single-machine disk-based graph system for interprocedural static analyses of large-scale systems code. *ACM SIGARCH Computer Architecture News*, 45 (1):389–404, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Widdoes:1976:MMM

[Wid76] Lawrence C. Widdoes, Jr. The Minerva multi-microprocessor. *ACM SIGARCH Computer*

Architecture News, 4(4):34–39, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wiecek:1982:CSV

[Wie82] Cheryl A. Wiecek. A case study of VAX-11 instruction set usage for compiler execution. *ACM SIGARCH Computer Architecture News*, 10(2):177–184, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Williams:1978:MSD

[Wil78] Rhon Williams. A multiprocessing system for the direct execution of LISP. *ACM SIGARCH Computer Architecture News*, 7(2):35–41, August 1978. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:1982:HSM

[Wil82] M. V. Wilkes. Hardware support for memory protection: Capability implementations. *ACM SIGARCH Computer Architecture News*, 10(2):107–116, March 1982. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:1983:KJI

[Wil83a] Maurice V. Wilkes. Keeping jump instructions out of the pipeline of a RISC-like computer. *ACM SIGARCH Computer Architecture News*, 11(5):5–7, December 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:1983:SPS

[Wil83b] Maurice V. Wilkes. Size, power, and speed (keynote address). *ACM SIGARCH Computer Architecture News*, 11 (3):2–4, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilson:1987:HCB

[Wil87] A. W. Wilson, Jr. Hierarchical cache/bus architecture for shared memory multiprocessors. *ACM SIGARCH Computer Architecture News*, 15 (2):244–252, 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Williams:1988:SSS

[Wil88] Fleur Liane Williams. Should SCC set condition codes? *ACM SIGARCH Computer Architecture News*, 16(4):145–149, September 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilson:1991:PSP

[Wil91] Paul R. Wilson. Pointer swizzling at page fault time: efficiently supporting huge address spaces on standard hardware. *ACM SIGARCH Computer Architecture News*, 19 (4):6–13, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:1995:MWC

[Wil95] Maurice V. Wilkes. The memory wall and the CMOS end-point. *ACM SIGARCH Computer Architecture News*, 23(4):4–6, September 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilmot:1998:DTM

[Wil98] Dick Wilmot. Data threaded microarchitecture. *ACM SIGARCH Computer Architecture News*, 26(5):22–32, December 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilkes:2001:MGF

[Wil01] Maurice V. Wilkes. The memory gap and the future of high performance memories. *ACM SIGARCH Computer Architecture News*, 29 (1):2–7, March 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Williams:2016:BIC

[Wil16] R. Stanley Williams. Brain inspired computing. *ACM SIGARCH Computer Architecture News*, 44(2):295, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Winfree:2008:TMP

[Win08] Erik Winfree. Toward molecular programming with DNA. *ACM SIGARCH Computer Architecture News*, 36(1): 1, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Whitney:2009:FTA

[WIPK09] Mark G. Whitney, Nemanja Isailovic, Yatish Patel, and John Kubiatowicz. A fault tolerant, area efficient architecture for Shor's factoring algorithm. *ACM SIGARCH Computer Architecture News*, 37(3):383–394, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wirth:1987:HAP

[Wir87] Niklaus Wirth. Hardware architectures for programming languages and programming languages for hardware architectures. *ACM SIGARCH Computer Architecture News*, 15(5):2–8, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wise:1986:EES

[Wis86] M. J. Wise. Experimenting with EPILOG: some results and preliminary conclusions. *ACM SIGARCH Computer Architecture News*, 14(2):119–127, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wittie:1976:EMR

[Wit76] Larry D. Wittie. Efficient message routing in Mega-Micro-

Computer networks. *ACM SIGARCH Computer Architecture News*, 4(4):136–140, January 1976. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Witchel:2016:PPW

[Wit16] Emmett Witchel. Programmer productivity in a world of mushy interfaces: Challenges of the post-ISA reality. *ACM SIGARCH Computer Architecture News*, 44(2):591, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wolf:1985:MMI

[WJ85] G. Wolf and J. R. Jump. Matrix multiplication in an interleaved array processing architecture. *ACM SIGARCH Computer Architecture News*, 13(3):11–17, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wentzlaff:2012:CFG

[WJGA12] David Wentzlaff, Christopher J. Jackson, Patrick Griffin, and Anant Agarwal. Configurable fine-grain protection for multicore processor virtualization. *ACM SIGARCH Computer Architecture News*, 40(3):464–475, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Wu:2004:FOM

[WJMC04] Qiang Wu, Philo Juang, Margaret Martonosi, and Douglas W. Clark. Formal online methods for voltage/frequency control in multiple clock domain microprocessors. *ACM SIGARCH Computer Architecture News*, 32(5):248–259, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2015:CAS

[WJZ15] Xinying Wang, Phillip H. Jones, and Joseph Zambreno. A configurable architecture for sparse *LU* decomposition on matrices with arbitrary patterns. *ACM SIGARCH Computer Architecture News*, 43 (4):76–81, September 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wang:2015:SPC

[WJZY15] Rujia Wang, Lei Jiang, Youtao Zhang, and Jun Yang. SD–PCM: Constructing reliable super dense phase change memory under write disturbance. *ACM SIGARCH Computer Architecture News*, 43 (1):19–31, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wood:1989:SRD

[WK89] D. A. Wood and R. H. Katz. Supporting reference and dirty bits in SPUR's virtual address cache. *ACM SIGARCH Computer Architecture News*, 17(3):122–130, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wegiel:2008:MCV

[WK08] Michal Wegiel and Chandra Krintz. The mapping collector: virtual memory support for generational, parallel, and concurrent compaction. *ACM SIGARCH Computer Architecture News*, 36(1):91–102, March 2008. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wegiel:2009:DPC

[WK09] Michal Wegiel and Chandra Krintz. Dynamic prediction of collection yield for managed runtimes. *ACM SIGARCH Computer Architecture News*, 37(1):289–300, March 2009. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wang:2012:IWE

[WKJ12] Zhe Wang, Samira M. Khan, and Daniel A. Jiménez. Improving writeback efficiency with decoupled last-write prediction. *ACM SIGARCH Computer Architecture News*, 40(3):309–320, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Wei:1988:EGN

[WL88] S. Wei and G. Lee. Extra group network: a cost-effective fault-tolerant multistage interconnection network. *ACM SIGARCH Computer Architecture News*, 16(2):108–115, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2007:NCD

[WL07] Zhenghong Wang and Ruby B. Lee. New cache designs for thwarting software cache-based side channel attacks. *ACM SIGARCH Computer Architecture News*, 35(2):494–505, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Woo:2010:CPD

[WL10] Dong Hyuk Woo and Hsien-Hsin S. Lee. COMPASS: a programmable data prefetcher using idle GPU shaders. *ACM SIGARCH Computer Architecture News*, 38(1):297–310, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2017:DAC

[WL17] Kai Wang and Calvin Lin. Decoupled affine computation for SIMT GPUs. *ACM SIGARCH Computer Architecture News*, 45(2):295–306, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wadden:2014:RWD

[WLG+14] Jack Wadden, Alexander Lyashevsky, Sudhanva Gurumurthi, Vilas Sridharan, and Kevin Skadron. Real-world design and evaluation of compiler-managed GPU redundant multithreading. *ACM SIGARCH Computer Architecture News*, 42 (3):73–84, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wu:2014:QAD

[WLP+14] Lisa Wu, Andrea Lottarini, Timothy K. Paine, Martha A. Kim, and Kenneth A. Ross. Q100: the architecture and design of a database processing unit. *ACM SIGARCH Computer Architecture News*, 42(1):255–268, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wah:1984:SMM

[WLY84] Benjamin W. Wah, Guo-Jie Li, and Chee-Fen Yu. The status of MANIP — a multicomputer architecture for solving, combinatorial extremum-search problems. *ACM SIGARCH Computer Architecture News*, 12 (3):56–63, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wu:2009:HCA

[WLZ+09] Xiaoxia Wu, Jian Li, Lixin Zhang, Evan Speight, Ram Rajamony, and Yuan Xie. Hybrid cache architecture with disparate memory technologies. *ACM SIGARCH Computer Architecture News*, 37 (3):34–45, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wu:2017:FEF

[WLZJ17] Bo Wu, Xu Liu, Xiaobo Zhou, and Changjun Jiang. FLEP: Enabling flexible and efficient preemption on GPUs. *ACM SIGARCH Computer Architecture News*, 45(1):483–496, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Winsor:1988:ABH

[WM88] D. C. Winsor and T. N. Mudge. Analysis of bus hierarchies for multiprocessors. *ACM SIGARCH Computer Architecture News*, 16(2):100–107, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wulf:1995:HMW

[WM95] Wm. A. Wulf and Sally A. McKee. Hitting the memory wall: implications of the obvious. *ACM SIGARCH Computer Architecture News*, 23(1):20–24, March 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2016:RTE

[WM16] Xiaodong Wang and José F. Martínez. ReBudget: Trading off efficiency vs. fairness in market-based multicore resource allocation via runtime budget reassignment. *ACM SIGARCH Computer Architecture News*, 44(2):19–32, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wang:2007:EAA

[WMP07] Nicholas J. Wang, Aqeel Mahesri, and Sanjay J. Patel. Examining ACE analysis reliability estimates using fault-injection. *ACM SIGARCH Computer Architecture News*, 35(2):460–469, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2009:TCP

[WMW09] Yefu Wang, Kai Ma, and Xiaorui Wang. Temperature-constrained power control for chip multiprocessors with online model estimation. *ACM SIGARCH Computer Architecture News*, 37(3):314–324, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Watanabe:2014:GAH

[WN14] Tsuyoshi Watanabe and Naohito Nakasato. GPU accelerated hybrid tree algorithm for collision less N-body simulations. *ACM SIGARCH Computer Architecture News*, 42(4):15–20, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Woo:1986:CHU

[WO86] Nam Sung Woo and Richard O'Keefe. A comment on "A hardware unification unit: design and analysis". *ACM SIGARCH Computer Architecture News*, 14(1):2–3, January 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wolman:1989:ISI

[WO89] B. Wolman and T. M. Olson. IOBENCH: a system independent IO benchmark. *ACM SIGARCH Computer Architecture News*, 17(5):55–70, September 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wilson:1997:DHB

[WO97] Kenneth M. Wilson and Kunle Olukotun. Designing high bandwidth on-chip caches. *ACM SIGARCH Computer Architecture News*, 25(2):121–132, May 1997. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wolman:1989:ASB

[Wol89] B. L. Wolman. An analysis of server-based locking. *ACM SIGARCH Computer Architecture News*, 17(5):78–82, September 1989. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wong:1989:SAS

[Won89] W. F. Wong. A stack addressing scheme based on windowing. *ACM SIGARCH Computer Architecture News*, 17(1):63–69, March 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wong:2007:CBS

[Won07] Michael Wong. C++ benchmarks in SPEC CPU2006. *ACM SIGARCH Computer Architecture News*, 35(1):77–83, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wong:2016:PEA

[Won16] Daniel Wong. Peak efficiency aware scheduling for highly energy proportional servers. *ACM SIGARCH Computer Architecture News*, 44(3):481–492, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Woo:1985:HUU

[Woo85] Nam Sung Woo. A hardware unification unit: design and analysis. *ACM SIGARCH Computer Architecture News*, 13(3):198–205, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Woo:1986:RCC

[Woo86] Nam Sung Woo. A reply to comments "A Comment on 'A Hardware Unification Unit: Design and Analysis" '. *ACM SIGARCH Computer Architecture News*, 14(3):2–4, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wood:2014:RSA

[Woo14] David A. Wood. Resolved: specialized architectures, languages, and system software should supplant general-purpose alternatives within a decade. *ACM SIGARCH Computer Architecture News*, 42(1):653–654, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wilson:1996:ICP

[WOR96] Kenneth M. Wilson, Kunle Olukotun, and Mendel Rosenblum. Increasing cache port efficiency for dynamic superscalar microprocessors. *ACM SIGARCH Computer Architecture News*, 24(2):147–157, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Woo:1995:SPC

[WOT+95] Steven Cameron Woo, Moriyoshi Ohara, Evan Torrie, Jaswinder Pal Singh, and Anoop Gupta. The SPLASH-2 programs: characterization and methodological considerations. *ACM*

SIGARCH Computer Architecture News, 23(2):24–36, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wall:1987:MEU

[WP87] David W. Wall and Michael L. Powell. The Mahler experience: using an intermediate language as the machine description. *ACM SIGARCH Computer Architecture News*, 15(5):100–104, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:1992:RCD

[WQL92] Wen-Hann Wang, Jim Quinlan, and Konrad Lai. Revisit the case for direct-mapped chaches: a case for two-way set-associative level-two caches. *ACM SIGARCH Computer Architecture News*, 20(2):437, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wedig:1984:RBI

[WR84] Robert G. Wedig and Marc A. Rose. The reduction of branch instruction execution overhead using structured control flow. *ACM SIGARCH Computer Architecture News*, 12(3):119–125, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wray:1991:TSD

[Wra91] Stuart C. Wray. Time-sequenced DMA for multimedia computers. *ACM SIGARCH Computer Architecture News*, 19(4):132–137, June 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2013:VPD

[WRS13] Di Wang, Chuangang Ren, and Anand Sivasubramaniam. Virtualizing power distribution in datacenters. *ACM SIGARCH Computer Architecture News*, 41(3):595–606, June 2013. ICSA '13 conference proceedings.

Wang:2016:LLA

[WRSY16] Jin Wang, Norm Rubin, Albert Sidelnik, and Sudhakar Yalamanchili. LaPerm: locality aware scheduler for dynamic parallelism on GPUs. *ACM SIGARCH Computer Architecture News*, 44(3): 583–595, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wade:1974:IDM

[WS74] James F. Wade and Paul D. Stigall. Instruction design to minimize program size. *ACM SIGARCH Computer Architecture News*, 3(4):41–44, December 1974. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weiss:1984:IIL

[WS84] Shlomo Weiss and James E. Smith. Instruction issue logic for pipelined supercomputers. *ACM SIGARCH Computer Architecture News*, 12(3):110–118, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Whitby-Strevens:1985:T

[WS85] Colin Whitby-Strevens. The transputer. *ACM SIGARCH Computer Architecture News*, 13(3):292–300, June 1985. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Weiss:1987:SSC

[WS87] Shlomo Weiss and James E. Smith. A study of scalar compilation techniques for pipelined supercomputers. *ACM SIGARCH Computer Architecture News*, 15(5):105–109, October 1987. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Williams:1990:ADR

[WS90] Fleur L. Williams and Gordon B. Steven. Address and data register separation on the M68000 family. *ACM SIGARCH Computer Architecture News*, 18 (2):85–89, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wolfe:1991:VIS

[WS91] Andrew Wolfe and John P. Shen. A variable instruction stream extension to the VLIW architecture. *ACM SIGARCH Computer Architecture News*, 19(2):2–14, April 1991. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Waliullah:2007:SFC

[WS07] M. M. Waliullah and Per Stenstrom. Starvation-free commit arbitration policies for transactional memory systems. *ACM SIGARCH Computer Architecture News*, 35(1):39–46, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wittenbrink:1992:CWG

[WSC92] C. M. Wittenbrink, A. K. Somani, and C. H. Chen. Cache write generate for high performance parallel processing. *ACM SIGARCH Computer Architecture News*, 20 (2):438, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2014:GRS

[WSC+14] Tao Wang, Guangyu Sun, Jiahua Chen, Jian Gong, Haoyang Wu, Xiaoguang Li, Songwu Lu, and Jason Cong. GRT: a reconfigurable SDR platform with high performance and usability. *ACM SIGARCH Computer Ar-*

chitecture News, 42(4):51–56, September 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wenisch:2005:TSS

[WSH+05] Thomas F. Wenisch, Stephen Somogyi, Nikolaos Hardavellas, Jangwoo Kim, Anastassia Ailamaki, and Babak Falsafi. Temporal streaming of shared memory. *ACM SIGARCH Computer Architecture News*, 33(2):222–233, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Widigen:1996:EOR

[WSM96] Larry Widigen, Elliot Sowadsky, and Kevin McGrath. Eliminating operand read latency. *ACM SIGARCH Computer Architecture News*, 24 (5):18–22, December 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Woh:2009:AAA

[WSM+09] Mark Woh, Sangwon Seo, Scott Mahlke, Trevor Mudge, Chaitali Chakrabarti, and Krisztian Flautner. AnySP: anytime anywhere anyway signal processing. *ACM SIGARCH Computer Architecture News*, 37(3):128–139, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:1995:CCA

[WSY95] Hong Wang, Tong Sun, and Qing Yang. CAT—caching address tags: a technique for reducing area cost of on-chip caches. *ACM SIGARCH Computer Architecture News*, 23(2):381–390, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wulf:1988:WCA

[Wul88] Wm. A. Wulf. The WM computer architecture. *ACM SIGARCH Computer Architecture News*, 16(1):70–84, March 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wulf:1992:EWA

[Wul92] Wm. A. Wulf. Evaluation of the WM architecture. *ACM SIGARCH Computer Architecture News*, 20(2):382–390, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wong:1989:TDH

[WW89] K.-F. Wong and M. H. Williams. A type driven hardware engine for Prolog clause retrieval over a large knowledge base. *ACM SIGARCH Computer Architecture News*, 17(3):211–222, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Waldspurger:1993:RRF

[WW93] Carl A. Waldspurger and William E. Weihl. Register relocation: flexible contexts for multithreading. *ACM SIGARCH Computer Architecture News*, 21(2):120–130, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Watanabe:2012:MCP

[WW12] Takahiro Watanabe and Minoru Watanabe. 0.18μ m CMOS process high-sensitivity optically reconfigurable gate array VLSI. *ACM SIGARCH Computer Architecture News*, 40(5):82–86, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

Wang:2013:TEH

[WW13] Cheng Wang and Youfeng Wu. TSO_ATOMICITY: efficient hardware primitive for TSO-preserving region optimizations. *ACM SIGARCH Computer Architecture News*, 41(1):509–520, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wu:2001:CFF

[WWA01] Lisa Wu, Chris Weaver, and Todd Austin. CryptoManiac: a fast flexible architecture for secure communication. *ACM SIGARCH Computer Architecture News*, 29(2):110–119, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Woodruff:2014:CCM

[WWC+14] Jonathan Woodruff, Robert N. M. Watson, David Chisnall, Simon W. Moore, Jonathan Anderson, Brooks Davis, Ben Laurie, Peter G. Neumann, Robert Norton, and Michael Roe. The CHERI capability model: revisiting RISC in an age of risk. *ACM SIGARCH Computer Architecture News*, 42(3):457–468, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wunderlich:2003:SAM

[WWFH03] Roland E. Wunderlich, Thomas F. Wenisch, Babak Falsafi, and James C. Hoe. SMARTS: accelerating microarchitecture simulation via rigorous statistical sampling. *ACM SIGARCH Computer Architecture News*, 31(2):84–97, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Watson:1988:FPA

[WWW+88] I. Watson, V. Woods, P. Watson, R. Banach, M. Greenberg, and J. Sargeant. Flagship: a parallel architecture for declarative programming. *ACM SIGARCH Computer Architecture News*, 16(2):124–

130, May 1988. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2005:GFB

[WY05] H. C. Wang and C. K. Yuen. A general framework to build new CPUs by mapping abstract machine code to instruction level parallel execution hardware. *ACM SIGARCH Computer Architecture News*, 33(4):113–120, November 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2017:QSS

[WYM+17] Zhenning Wang, Jun Yang, Rami Melhem, Bruce Childers, Youtao Zhang, and Minyi Guo. Quality of service support for fine-grained sharing on GPUs. *ACM SIGARCH Computer Architecture News*, 45(2):269–281, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Weeratunge:2010:AMD

[WZJ10] Dasarath Weeratunge, Xiangyu Zhang, and Suresh Jagannathan. Analyzing multicore dumps to facilitate concurrency bug reproduction. *ACM SIGARCH Computer Architecture News*, 38(1):155–166, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Wang:2016:AMR

[WZL+16] Siyang Wang, Xiangyu Zhang, Yuxuan Li, Ramin Bashizade, Song Yang, Chris Dwyer, and Alvin R. Lebeck. Accelerating Markov random field inference using molecular optical Gibbs sampling units. *ACM SIGARCH Computer Architecture News*, 44(3):558–569, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Wu:2013:SMP

[WZY13] Meng-Ju Wu, Minshu Zhao, and Donald Yeung. Studying multicore processor scaling via reuse distance analysis. *ACM SIGARCH Computer Architecture News*, 41(3):499–510, June 2013. ICSA '13 conference proceedings.

Xu:2003:FDR

[XBH03] Min Xu, Rastislav Bodik, and Mark D. Hill. A “flight data recorder” for enabling full-system multiprocessor deterministic replay. *ACM SIGARCH Computer Architecture News*, 31(2):122–135, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Xiang:2013:HHO

[XDLB13] Xiaoya Xiang, Chen Ding, Hao Luo, and Bin Bao. HOTL: a higher order theory of locality. *ACM SIGARCH*

Computer Architecture News, 41(1):343–356, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Xue:2010:ICF

[XGC+10] Jing Xue, Alok Garg, Berkehan Ciftcioğlu, Jianyun Hu, Shang Wang, Ioannis Savidis, Manish Jain, Rebecca Berman, Peng Liu, Michael Huang, Hui Wu, Eby Friedman, Gary Wicks, and Duncan Moore. An intra-chip free-space optical interconnect. *ACM SIGARCH Computer Architecture News*, 38(3):94–105, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Xu:2006:RTR

[XHB06] Min Xu, Mark D. Hill, and Rastislav Bodik. A regulated transitive reduction (RTR) for longer memory race recording. *ACM SIGARCH Computer Architecture News*, 34(5):49–60, December 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Xu:2016:WSE

[XJK+16] Qiumin Xu, Hyeran Jeon, Keunsoo Kim, Won Woo Ro, and Murali Annavaram. Warped-slicer: efficient intra-SM slicing through dynamic resource partitioning for GPU multiprogramming. *ACM SIGARCH Computer Architecture News*, 44(3):230–242, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Xie:2009:PPI

[XL09] Yuejian Xie and Gabriel H. Loh. PIPP: promotion/ insertion pseudo-partitioning of multi-core shared caches. *ACM SIGARCH Computer Architecture News*, 37(3):174–183, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Xu:2015:ALD

[XLWZ15] Chao Xu, Felix Xiaozhu Lin, Yuyang Wang, and Lin Zhong. Automated OS-level device runtime power management. *ACM SIGARCH Computer Architecture News*, 43(1):239–252, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Xia:1996:IPS

[XT96] Chun Xia and Josep Torrellas. Instruction prefetching of systems codes with layout optimized for reduced cache misses. *ACM SIGARCH Computer Architecture News*, 24(2):271–282, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Xu:2012:TPV

[XYM12] Yi Xu, Jun Yang, and Rami Melhem. Tolerating process variations in nanophotonic on-chip networks. *ACM SIGARCH Computer Architecture News*, 40(3):142–152, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Youssef:1990:NAF

[YA90] Abdou Youssef and Bruce Arden. A new approach to fast control of $r_2 \times r_2$ 3-stage Benes networks of $r \times r$ crossbar switches. *ACM SIGARCH Computer Architecture News*, 18(3a):50–59, June 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:2013:BFP

[YBMT13] Hailong Yang, Alex Breslow, Jason Mars, and Lingjia Tang. Bubble-Flux: precise online QoS management for increased utilization in warehouse scale computers. *ACM SIGARCH Computer Architecture News*, 41(3):607–618, June 2013. ICSA '13 conference proceedings.

Yoon:2012:BEM

[YCMR12] Doe Hyun Yoon, Jichuan Chang, Naveen Muralimanohar, and Parthasarathy Ranganathan. BOOM: enabling mobile memory based low-power server DIMMs. *ACM SIGARCH Computer Architecture News*, 40(3):25–36, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Yang:2017:PIP

[YCR+17] Hailong Yang, Quan Chen, Moeiz Riaz, Zhongzhi Luan, Lingjia Tang, and Jason Mars. PowerChief: Intelligent power allocation for multi-stage applications to improve responsiveness on power constrained CMP. *ACM SIGARCH Computer Architecture News*, 45(2):133–146, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yehia:2005:LSA

[YCT05] Sami Yehia, Jean-François Collard, and Olivier Temam. Load squared: adding logic close to memory to reduce the latency of indirect loads with high miss ratios. *ACM SIGARCH Computer Architecture News*, 33(3):17–24, June 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoon:2009:MME

[YE09] Doe Hyun Yoon and Mattan Erez. Memory mapped ECC: low-cost error protection for last level caches. *ACM SIGARCH Computer Architecture News*, 37(3):116–127, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoon:2010:VFE

[YE10] Doe Hyun Yoon and Mattan Erez. Virtualized and flexible ECC for main memory. *ACM SIGARCH Computer Architecture News*, 38(1):397–408, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yelick:2009:TWW

[Yel09] Katherine Yelick. Ten ways to waste a parallel computer. *ACM SIGARCH Computer Architecture News*, 37 (3):1, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yan:2006:ICP

[YEP+06] Chenyu Yan, Daniel Englender, Milos Prvulovic, Brian Rogers, and Yan Solihin. Improving cost, performance, and security of memory encryption and authentication. *ACM SIGARCH Computer Architecture News*, 34(2):179–190, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoaz:1999:STI

[YERJ99] Adi Yoaz, Mattan Erez, Ronny Ronen, and Stephan Jourdan. Speculation techniques for improving load related instruction scheduling. *ACM SIGARCH Computer Architecture News*, 27(2):42–53, May 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yeh:2007:PAR

[YFPR07] Thomas Y. Yeh, Petros Faloutsos, Sanjay J. Patel, and Glenn Reinman. ParallAX: an architecture for real-time physics. *ACM SIGARCH Computer Architecture News*, 35(2):232–243, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Young:1995:CAS

[YGS95] Cliff Young, Nicolas Gloy, and Michael D. Smith. A comparative analysis of schemes for correlated branch prediction. *ACM SIGARCH Computer Architecture News*, 23(2):276–286, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yan:2017:SHA

[YGST17] Mengjia Yan, Bhargava Gopireddy, Thomas Shull, and Josep Torrellas. Secure hierarchy-aware cache replacement policy (SHARP): Defending against cache-based side channel attacks. *ACM SIGARCH Computer Architecture News*, 45 (2):347–360, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yu:2003:TBS

[YHF03] Ryan W. S. Yu, Gary K. W. Hau, and Anthony S. Fong. Test bench for software development of object-oriented processor. *ACM SIGARCH Computer Architecture News*, 31(5):5–9, December 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuhara:1986:EFA

[YHN+86] M. Yuhara, A. Hattori, M. Niwa, M. Kishimoto, and H. Hayashi. Evaluation of the FACOM ALPHA Lisp machine. *ACM SIGARCH Computer Architecture News*, 14(2):184–190, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yu:2014:CPR

[YHZX14] Xiao Yu, Shi Han, Dongmei Zhang, and Tao Xie. Comprehending performance from real-world execution traces: a device-driver case. *ACM SIGARCH Computer Architecture News*, 42(1):193–206, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yokota:1986:MAR

[YI86] H. Yokota and H. Itoh. A model and an architecture for a relational knowledge base. *ACM SIGARCH Computer Architecture News*, 14 (2):2–9, June 1986. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoon:2011:AGM

[YJE11] Doe Hyun Yoon, Min Kyu Jeong, and Mattan Erez. Adaptive granularity memory systems: a tradeoff between storage efficiency and throughput. *ACM SIGARCH Computer Architecture News*, 39(3):295–306, June 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yoon:2012:DGM

[YJSE12] Doe Hyun Yoon, Min Kyu Jeong, Michael Sullivan, and Mattan Erez. The dynamic granularity memory system. *ACM SIGARCH Computer Architecture News*, 40(3): 548–559, June 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). ISCA '12 conference proceedings.

Yu:2016:CWM

[YJX+16] Xiao Yu, Pallavi Joshi, Jianwu Xu, Guoliang Jin, Hui Zhang, and Guofei Jiang. CloudSeer: Workflow monitoring of cloud infrastructures via interleaved logs. *ACM SIGARCH Computer Architecture News*, 44 (2):489–502, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ye:2005:RRA

[YK05] Dong Ye and David Kaeli. A reliable return address stack: microarchitectural features to defeat stack smashing. *ACM SIGARCH Computer Architecture News*, 33(1):73–80, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yeung:1996:MMS

[YKA96] Donald Yeung, John Kubiatowicz, and Anant Agarwal. MGS: a multigrain shared memory system. *ACM SIGARCH Computer Architecture News*, 24(2):44–55, May 1996. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yum:2001:QPC

[YKD01] Ki Hwan Yum, Eun Jung Kim, and Chita R. Das. QoS provisioning in clusters: an investigation of Router and NIC design. *ACM SIGARCH Computer Architecture News*, 29(2):120–129, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoon:2016:VTM

[YKL+16] Myung Kuk Yoon, Keunsoo Kim, Sangpil Lee, Won Woo Ro, and Murali Annavaram. Virtual thread: maximizing thread-level parallelism beyond GPU scheduling limit. *ACM SIGARCH Computer Architecture News*, 44(3):609–621, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Kim:2002:IWS

[yKPR02] Hyong youb Kim, Vijay S. Pai, and Scott Rixner. Increasing Web server throughput with network interface data caching. *ACM SIGARCH Computer Architecture News*, 30(5):239–250, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yasrebi:1984:SAS

[YL84] Mehrad Yasrebi and G. J. Lipovski. A state-of-the-art SIMD two-dimensional FFT array processor. *ACM SIGARCH Computer Architecture News*, 12(3):21–27, June 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yao:2016:OCO

[YL16] Yuan Yao and Zhonghai Lu. Opportunistic competition overhead reduction for expediting critical section in NoC based CMPs. *ACM SIGARCH Computer Architecture News*, 44(3):279–290, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yan:2010:LCL

[YLHL10] Guihai Yan, Xiaoyao Liang, Yinhe Han, and Xiaowei Li.

Leveraging the core-level complementary effects of PVT variations to reduce timing emergencies in multi-core processors. *ACM SIGARCH Computer Architecture News*, 38(3):485–496, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:1999:LMJ

[YLP+99] Byung-Sun Yang, Junpyo Lee, Jinpyo Park, Soo-Mook Moon, Kemal Ebcioğlu, and Erik Altman. Lightweight monitor for Java VM. *ACM SIGARCH Computer Architecture News*, 27(1):35–38, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yu:2017:SCD

[YLP+17] Jiecao Yu, Andrew Lukefahr, David Palframan, Ganesh Dasika, Reetuparna Das, and Scott Mahlke. Scalpel: Customizing DNN pruning to the underlying hardware parallelism. *ACM SIGARCH Computer Architecture News*, 45 (2):548–560, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yue:2006:NCB

[YLT06] Yao Yue, Chuang Lin, and Zhangxi Tan. NPCryptBench: a cryptographic benchmark suite for network processors. *ACM SIGARCH Computer Architecture News*, 34(1):49–56, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:2011:BPR

[YM11] Shufan Yang and T. M. McGinnity. A biologically plausible real-time spiking neuron simulation environment based on a multiple-FPGA platform. *ACM SIGARCH Computer Architecture News*, 39(4):78–81, September 2011. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Ye:2000:CHP

[YMHB00] Zhi Alex Ye, Andreas Moshovos, Scott Hauck, and Prithviraj Banerjee. CHIMAERA: a high-performance architecture with a tightly-coupled reconfigurable functional unit. *ACM SIGARCH Computer Architecture News*, 28(2):225–235, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yetim:2015:CMC

[YMM15] Yavuz Yetim, Sharad Malik, and Margaret Martonosi. CommGuard: Mitigating communication errors in error-prone parallel execution. *ACM SIGARCH Computer Architecture News*, 43(1):311–323, March 2015. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Yao:2007:OPD

[YMST07] Jun Yao, Shinobu Miwa, Hajime Shimada, and Shinji Tomita. Optimal pipeline depth with pipeline stage unification adoption. *ACM SIGARCH Computer Architecture News*, 35(5):3–9, December 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuan:2010:SED

[YMX+10] Ding Yuan, Haohui Mai, Weiwei Xiong, Lin Tan, Yuanyuan Zhou, and Shankar Pasupathy. SherLog: error diagnosis by connecting clues from run-time logs. *ACM SIGARCH Computer Architecture News*, 38(1):143–154, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yu:2009:CIC

[YN09] Jie Yu and Satish Narayanasamy. A case for an interleaving constrained shared-memory multi-processor. *ACM SIGARCH Computer Architecture News*, 37(3):325–336, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Young:2015:DWE

[YNQ15] Vinson Young, Prashant J. Nair, and Moinuddin K. Qureshi. DEUCE: Write-efficient encryption for non-volatile memories. *ACM SIGARCH Computer Architecture News*, 43(1):33–44, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Young:2017:DCD

[YNQ17] Vinson Young, Prashant J. Nair, and Moinuddin K. Qureshi. DICE: Compressing DRAM caches for bandwidth and capacity. *ACM SIGARCH Computer Architecture News*, 45(2):627–638, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yokota:1994:DND

[Yok94] Haruo Yokota. DR-nets: data-reconstruction networks for highly reliable parallel-disk systems. *ACM SIGARCH Computer Architecture News*, 22(4):41–46, September 1994. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yomtov:1992:PED

[Yom92] Ruben Yomtov. Performance evaluation of disk subsystems. *ACM SIGARCH Computer Architecture News*, 20(2):429, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yeh:1992:AIT

[YP92] Tse-Yu Yeh and Yale N. Patt. Alternative implementations of two-level adaptive branch prediction. *ACM SIGARCH Computer Architecture News*, 20(2):124–134, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yeh:1993:CDB

[YP93] Tse-Yu Yeh and Yale N. Patt. A comparison of dynamic branch predictors that use two levels of branch history. *ACM SIGARCH Computer Architecture News*, 21(2):257–266, May 1993. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yeh:1998:AIT

[YP98a] Tse-Yu Yeh and Yale N. Patt. Alternative implementations of two-level adaptive branch prediction. In ACM [ACM98a], pages 451–461. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Yeh:1998:RAI

[YP98b] Tse-Yu Yeh and Yale N. Patt. Retrospective: Alternative implementations of two-level adaptive training branch prediction. In ACM [ACM98a], pages 87–88. ISBN 0-8186-8491-7, 0-8186-8492-5, 0-8186-8493-3. LCCN QA76.9.A73 S97 1998. URL `http://portal.acm.org/toc.cfm?id=279358; http://portal.acm.org/toc.cfm?id=285930`. ACM Order Number 414984. IEEE Computer Society Order Number PR08491; IEEE Order Plan Catalog Number 98CB36235.

Yeh:1983:PSC

[YPD83] Phil C. C. Yeh, Janak H. Patel, and Edward S. Davidson. Performance of shared cache for parallel-pipelined computer systems. *ACM SIGARCH Computer Architecture News*, 11(3):117–123, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Ye:2007:CFA

[YRK07] Dong Ye, Joydeep Ray, and David Kaeli. Characterization of file I/O activity for SPEC CPU2006. *ACM SIGARCH Computer Architecture News*, 35(1):112–117, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yoon:2016:PPI

[YSCC16] Man-Ki Yoon, Negin Salajegheh, Yin Chen, and Mihai Christodorescu. PIFT: Predictive information-flow tracking. *ACM SIGARCH Computer Architecture News*, 44 (2):713–725, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yuba:1990:DCD

[YSY+90] Toshitsugu Yuba, Toshio Shimada, Yoshinori Yamaguchi, Kei Hiraki, and Shuichi Sakai. Dataflow computer development in Japan. *ACM SIGARCH Computer Architecture News*, 18(3b):140–147, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yehia:2004:SDI

[YT04] Sami Yehia and Olivier Temam. From sequences of dependent instructions to functions: An approach for improving performance without ILP or speculation. *ACM SIGARCH Computer Architecture News*, 32(2): 238, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yamaguchi:1983:PEL

[YTY83] Yoshinori Yamaguchi, Kenji Toda, and Toshitsugu Yuba. A performance evaluation of a Lisp-based data-driven machine (EM-3). *ACM SIGARCH Computer Architecture News*, 11(3):363–369, June 1983. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuen:1981:EPS

[Yue81] C. K. Yuen. Extending the power of short-wordlength processors by means of context-dependent machine instructions. *ACM SIGARCH Computer Architecture News*, 9(6):9–15, October 1981. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuen:1984:SAI

[Yue84] C. K. Yuen. Some applications of the implicit register reference. *ACM SIGARCH Computer Architecture News*, 12(1):58–63, March 1984. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuen:1999:ASC

[Yue99a] C. K. Yuen. Architectural support for the cache based vector computation. *ACM SIGARCH Computer Architecture News*, 27(3):18–23, June 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuen:1999:SR

[Yue99b] C. K. Yuen. Stack and RISC. *ACM SIGARCH Computer Architecture News*, 27 (1):3–9, March 1999. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yan:2017:HTC

[YVCB17] Zi Yan, Ján Veselý, Guilherme Cox, and Abhishek Bhattacharjee. Hardware translation coherence for virtualized systems. *ACM SIGARCH Computer Architecture News*, 45(2):430–443, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Yuen:1989:BDD

[YW89] C. K. Yuen and W. F. Wong. A bidirectional data driven Lisp engine for the direct execution of Lisp in parallel. *ACM SIGARCH Computer Architecture News*, 17(4):119–130, June 1989. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:2006:TAD

[YXR06] Qing Yang, Weijun Xiao, and Jin Ren. TRAP-array: a disk array architecture providing timely recovery to any point-in-time. *ACM SIGARCH Computer Architecture News*, 34(2):289–301, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:1992:NCD

[YY92] Qing Yang and Liping Wu Yang. A novel cache design for vector processing. *ACM SIGARCH Computer Architecture News*, 20(2):362–371, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yang:2007:BSP

[YYX+07] Xuejun Yang, Xiaobo Yan, Zuocheng Xing, Yu Deng, Jiang Jiang, and Ying Zhang. A 64-bit stream processor architecture for scientific applications. *ACM SIGARCH Computer Architecture News*, 35(2):210–219, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yan:2007:EIC

[YZ07a] Jun Yan and Wei Zhang. Evaluating instruction cache vulnerability to transient errors. *ACM SIGARCH Computer Architecture News*, 35(4):21–28, September 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yan:2007:HMC

[YZ07b] Jun Yan and Wei Zhang. Hybrid multi-core architecture for boosting single-threaded performance. *ACM SIGARCH Computer Architecture News*, 35(1):141–148, March 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Yuan:2011:ISD

[YZP+11] Ding Yuan, Jing Zheng, Soyeon Park, Yuanyuan Zhou, and Stefan Savage. Improving software diagnosability via log enhancement. *ACM SIGARCH Computer Architecture News*, 39(1):3–14, March 2011. CODEN

CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:1998:PMC

[ZA98] Yinong Zhang and George B. Adams III. Performance modeling and code partitioning for the DS architecture. *ACM SIGARCH Computer Architecture News*, 26(3):293–304, June 1998. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2005:VRM

[ZA05] Michael Zhang and Krste Asanovic. Victim replication: Maximizing capacity while hiding wire delay in tiled chip multiprocessors. *ACM SIGARCH Computer Architecture News*, 33(2):336–345, May 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zahran:2003:CMH

[Zah03] Mohamed M. Zahran. On cache memory hierarchy for Chip-Multiprocessor. *ACM SIGARCH Computer Architecture News*, 31(1):39–48, March 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhao:2016:SHC

[ZAI+16] Qian Zhao, Motoki Amagasaki, Masahiro Iida, Morihiro Kuga, and Toshinori Sueyoshi. A study of heterogeneous computing design method based on virtualization technology. *ACM SIGARCH Computer Architecture News*, 44(4):86–91, September 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zaks:1973:MAF

[Zak73] Rodnay Zaks. A microprogrammed architecture for front end processing. *ACM SIGARCH Computer Architecture News*, 2(4):241–246, December 1973. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zaky:1977:MNN

[Zak77] S. G. Zaky. Microprocessors for non-numeric processing. *ACM SIGARCH Computer Architecture News*, 6(2): 23–30, May 1977. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zucker:1992:PSM

[ZB92] Richard N. Zucker and Jean-Loup Baer. A performance study of memory consistency models. *ACM SIGARCH Computer Architecture News*, 20(2):2–12, May 1992. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhan:2016:PMB

[ZBBL16] Xusheng Zhan, Yungang Bao, Christian Bienia, and Kai

Li. PARSEC3.0: a multicore benchmark suite with network stacks and SPLASH-2X. *ACM SIGARCH Computer Architecture News*, 44 (5):1–16, December 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhuravlev:2010:ASR

[ZBF10] Sergey Zhuravlev, Sergey Blagodurov, and Alexandra Fedorova. Addressing shared resource contention in multicore processors via scheduling. *ACM SIGARCH Computer Architecture News*, 38(1):129–142, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2002:EVC

[ZBJ+02] Yuanyuan Zhou, Angelos Bilas, Suresh Jagannathan, Cezary Dubnicki, James F. Philbin, and Kai Li. Experiences with VI communication for database storage. *ACM SIGARCH Computer Architecture News*, 30(2):257–268, May 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhai:2002:COS

[ZCSM02] Antonia Zhai, Christopher B. Colohan, J. Gregory Steffan, and Todd C. Mowry. Compiler optimization of scalar value communication between speculative threads. *ACM SIGARCH Computer Architecture News*, 30(5):171–183, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2014:HDH

[ZCX+14] Tao Zhang, Ke Chen, Cong Xu, Guangyu Sun, Tao Wang, and Yuan Xie. Half-DRAM: a high-bandwidth and low-power DRAM architecture from the rethinking of fine-grained activation. *ACM SIGARCH Computer Architecture News*, 42 (3):349–360, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2013:CFC

[ZdKL+13] Wei Zhang, Marc de Kruijf, Ang Li, Shan Lu, and Karthikeyan Sankaralingam. ConAir: featherweight concurrency bug recovery via single-threaded idempotent execution. *ACM SIGARCH Computer Architecture News*, 41(1):113–126, March 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhu:2016:DEQ

[ZE16] Haishan Zhu and Mattan Erez. Dirigent: Enforcing QoS for latency-critical tasks on shared multicore systems. *ACM SIGARCH Computer Architecture News*, 44 (2):33–47, May 2016. CODEN CANED2. ISSN 0163-

5964 (print), 1943-5851 (electronic).

Zeng:2002:EME

[ZELV02] Heng Zeng, Carla S. Ellis, Alvin R. Lebeck, and Amin Vahdat. ECOSystem: managing energy as a first class operating system resource. *ACM SIGARCH Computer Architecture News*, 30(5):123–132, December 2002. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2003:DGS

[ZFC03] Huiyang Zhou, Jill Flanagan, and Thomas M. Conte. Detecting global stride locality in value streams. *ACM SIGARCH Computer Architecture News*, 31(2):324–335, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2016:MPU

[ZH16] Huazhe Zhang and Henry Hoffmann. Maximizing performance under a power cap: a comparison of hardware, software, and hybrid techniques. *ACM SIGARCH Computer Architecture News*, 44(2):545–559, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zheng:2017:RMA

[ZH17] Ruohuang Zheng and Michael C. Huang. Redundant memory array architecture for efficient selective protection. *ACM SIGARCH Computer Architecture News*, 45(2):214–227, May 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2001:PLA

[Zha01] Jinsuo Zhang. The predictability of load address. *ACM SIGARCH Computer Architecture News*, 29(4):19–28, September 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2006:BCR

[Zha06] Chuanjun Zhang. Balanced cache: Reducing conflict misses of direct-mapped caches. *ACM SIGARCH Computer Architecture News*, 34(2):155–166, 2006. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2016:PUH

[Zho16] Yuanyuan Zhou. Programming uncertain <T> hings. *ACM SIGARCH Computer Architecture News*, 44(2):1–2, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhou:2016:CSI

[ZHW16] Yanqi Zhou, Henry Hoffmann, and David Wentzlaff. CASH: supporting IaaS customers with a sub-core configurable architecture. *ACM SIGARCH Computer Architecture News*, 44(3):682–694, June 2016.

CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zilles:2001:BHC

[Zil01] Craig B. Zilles. Benchmark health considered harmful. *ACM SIGARCH Computer Architecture News*, 29 (3):4–5, June 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2011:FED

[ZJG+11] Eddy Z. Zhang, Yunlian Jiang, Ziyu Guo, Kai Tian, and Xipeng Shen. On-the-fly elimination of dynamic irregularities for GPU computing. *ACM SIGARCH Computer Architecture News*, 39(1):369–380, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2017:PPD

[ZJL17] Tong Zhang, Changhee Jung, and Dongyoon Lee. ProRace: Practical data race detection for production use. *ACM SIGARCH Computer Architecture News*, 45(1):149–162, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zecca:1990:ECV

[ZK90] V. Zecca and A. Kamel. Elastodynamics on clustered vector multiprocessors. *ACM SIGARCH Computer Architecture News*, 18(3b):281–290, September 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zahedi:2014:RRE

[ZL14] Seyed Majid Zahedi and Benjamin C. Lee. REF: resource elasticity fairness with sharing incentives for multiprocessors. *ACM SIGARCH Computer Architecture News*, 42 (1):145–160, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2016:TED

[ZLJ16] Tong Zhang, Dongyoon Lee, and Changhee Jung. TxRace: Efficient data race detection using commodity hardware transactional memory. *ACM SIGARCH Computer Architecture News*, 44(2):159–173, May 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2011:CDC

[ZLO+11] Wei Zhang, Junghee Lim, Ramya Olichandran, Joel Scherpelz, Guoliang Jin, Shan Lu, and Thomas Reps. ConSeq: detecting concurrency bugs through sequential errors. *ACM SIGARCH Computer Architecture News*, 39 (1):251–264, March 2011. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zheng:2009:DDB

[ZLZZ09] Hongzhong Zheng, Jiang Lin, Zhao Zhang, and Zhichun Zhu. Decoupled DIMM: building high-bandwidth memory system using low-speed DRAM devices. *ACM SIGARCH Computer Architecture News*, 37(3):255–266, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2016:TAS

[ZMMT16] Yunqi Zhang, David Meisner, Jason Mars, and Lingjia Tang. Treadmill: attributing the source of tail latency through precise load testing and statistical inference. *ACM SIGARCH Computer Architecture News*, 44 (3):456–468, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2016:MWE

[ZNF+16] Lunkai Zhang, Brian Neely, Diana Franklin, Dmitri Strukov, Yuan Xie, and Frederic T. Chong. Mellow Writes: extending lifetime in resistive memories through selective slow write backs. *ACM SIGARCH Computer Architecture News*, 44(3): 519–531, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhou:2004:DTP

[ZPS+04] Pin Zhou, Vivek Pandey, Jagadeesan Sundaresan, Anand Raghuraman, Yuanyuan Zhou, and Sanjeev Kumar. Dynamic tracking of page miss ratio curve for memory management. *ACM SIGARCH Computer Architecture News*, 32 (5):177–188, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2004:IEA

[ZQL+04] Pin Zhou, Feng Qin, Wei Liu, Yuanyuan Zhou, and Josep Torrellas. iWatcher: Efficient architectural support for software debugging. *ACM SIGARCH Computer Architecture News*, 32(2): 224, March 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhu:2014:WAS

[ZR14] Yuhao Zhu and Vijay Janapa Reddi. WebCore: architectural support for mobile Web browsing. *ACM SIGARCH Computer Architecture News*, 42(3):541–552, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zahir:2000:CCD

[ZRMH00] Rumi Zahir, Jonathan Ross, Dale Morris, and Drew Hess. OS and compiler considerations in the design of the

IA-64 architecture. *ACM SIGARCH Computer Architecture News*, 28(5):212–221, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhao:2005:DMO

[ZRW05] Qin Zhao, Rodric Rabbah, and Weng-Fai Wong. Dynamic memory optimization using pool allocation and prefetching. *ACM SIGARCH Computer Architecture News*, 33 (5):27–32, December 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2014:EES

[ZRZ+14] Jiaqi Zhang, Lakshminarayanan Renganarayana, Xiaolan Zhang, Niyu Ge, Vasanth Bala, Tianyin Xu, and Yuanyuan Zhou. EnCore: exploiting system environment and correlation information for misconfiguration detection. *ACM SIGARCH Computer Architecture News*, 42(1):687–700, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zilles:2000:UBS

[ZS00] Craig B. Zilles and Gurindar S. Sohi. Understanding the backward slices of performance degrading instructions. *ACM SIGARCH Computer Architecture News*, 28(2):172–181, May 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zilles:2001:EBP

[ZS01] Craig Zilles and Gurindar Sohi. Execution-based prediction using speculative slices. *ACM SIGARCH Computer Architecture News*, 29(2):2–13, May 2001. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhao:2015:FPS

[ZS15] Zhijia Zhao and Xipeng Shen. On-the-fly principled speculation for FSM parallelization. *ACM SIGARCH Computer Architecture News*, 43 (1):619–630, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2017:ISC

[ZSG+17] Rui Zhang, Natalie Stanley, Christopher Griggs, Andrew Chi, and Cynthia Sturton. Identifying security critical properties for the dynamic verification of a processor. *ACM SIGARCH Computer Architecture News*, 45 (1):541–554, March 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhu:2007:SSB

[ZSHG07] Weirong Zhu, Vugranam C. Sreedhar, Ziang Hu, and Guang R. Gao. Synchronization state buffer: supporting efficient fine-grain synchronization on many-core architectures. *ACM SIGARCH Computer Architecture News*, 35(2):35–45, May 2007. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhao:2013:PAG

[ZSKD13] Hongzhou Zhao, Arrvindh Shriraman, Snehasish Kumar, and Sandhya Dwarkadas. Protozoa: adaptive granularity cache coherence. *ACM SIGARCH Computer Architecture News*, 41(3):547–558, June 2013. ICSA '13 conference proceedings.

Zhang:2010:CDS

[ZSL10] Wei Zhang, Chong Sun, and Shan Lu. ConMem: detecting severe concurrency bugs through an effect-oriented approach. *ACM SIGARCH Computer Architecture News*, 38(1):179–192, March 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:1995:SIA

[ZT95] Zheng Zhang and Josep Torrellas. Speeding up irregular applications in shared-memory multiprocessors: memory binding and group prefetching. *ACM SIGARCH Computer Architecture News*, 23 (2):188–199, May 1995. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zuberek:1980:TPN

[Zub80] W. M. Zuberek. Timed Petri nets and preliminary performance evaluation. *ACM SIGARCH Computer Architecture News*, 8(3):88–96, 1980. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2003:HCC

[ZVN03] Chuanjun Zhang, Frank Vahid, and Walid Najjar. A highly configurable cache architecture for embedded systems. *ACM SIGARCH Computer Architecture News*, 31(2):136–146, May 2003. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2014:SAS

[ZW14] Yanqi Zhou and David Wentzlaff. The sharing architecture: sub-core configurability for IaaS clouds. *ACM SIGARCH Computer Architecture News*, 42(1):559–574, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhou:2016:MMI

[ZW16] Yanqi Zhou and David Wentzlaff. MITTS: memory inter-arrival time traffic shaping. *ACM SIGARCH Computer Architecture News*, 44

(3):532–544, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2014:AIP

[ZWM+14] Runjie Zhang, Ke Wang, Brett H. Meyer, Mircea R. Stan, and Kevin Skadron. Architecture implications of pads as a scarce resource. *ACM SIGARCH Computer Architecture News*, 42(3): 373–384, June 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhao:2014:CES

[ZWS14] Zhijia Zhao, Bo Wu, and Xipeng Shen. Challenging the “embarrassingly sequential”: parallelizing finite state machine-based computations through principled speculation. *ACM SIGARCH Computer Architecture News*, 42 (1):543–558, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2015:HDL

[ZWSM15] Danfeng Zhang, Yao Wang, G. Edward Suh, and Andrew C. Myers. A hardware design language for timing-sensitive information-flow security. *ACM SIGARCH Computer Architecture News*, 43 (1):503–516, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhang:2000:FVL

[ZYG00] Youtao Zhang, Jun Yang, and Rajiv Gupta. Frequent value locality and value-centric data cache design. *ACM SIGARCH Computer Architecture News*, 28(5):150–159, December 2000. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zeng:2009:MCA

[ZYGP09] Hui Zeng, Matt Yourst, Kanad Ghose, and Dmitry Ponomarev. MPTLsim: a cycle-accurate, full-system simulator for x86-64 multicore architectures with coherent caches. *ACM SIGARCH Computer Architecture News*, 37(2):2–9, May 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2005:ASP

[ZYLG05] Youtao Zhang, Jun Yang, Yongjing Lin, and Lan Gao. Architectural support for protecting user privacy on trusted processors. *ACM SIGARCH Computer Architecture News*, 33(1):118–123, March 2005. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhang:2015:MRH

[ZYMS15] Yiying Zhang, Jian Yang, Amirsaman Memaripour, and Steven Swanson. Mojim: a reliable and highly-available non-volatile memory system. *ACM SIGARCH Computer Architecture News*, 43(1): 3–18, March 2015. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

Zhuang:2004:HIE

[ZZP04] Xiaotong Zhuang, Tao Zhang, and Santosh Pande. HIDE: an infrastructure for efficiently protecting information leakage on the address bus. *ACM SIGARCH Computer Architecture News*, 32(5):72–84, December 2004. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Zhou:2009:DEE

[ZZYZ09] Ping Zhou, Bo Zhao, Jun Yang, and Youtao Zhang. A durable and energy efficient main memory using phase change memory technology. *ACM SIGARCH Computer Architecture News*, 37 (3):14–23, June 2009. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).