Vita for Jack Dongarra

April 1, 1999

Current Position: (Joint)

Distinguished Professor
University of Tennessee
Department of Computer Science
107 Ayres Hall
Knoxville, TN 37996-1301
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Distinguished Scientist
Oak Ridge National Laboratory
Computer Science and Mathematics Division
PO BOX 2008 Building 6012
Oak Ridge, Tennessee 37821-6367

Current Residence:

107 Claymore Lane
Oak Ridge, TN 37830
Telephone: 423-481-8295

Personal: Birthdate: July 18, 1950; Birthplace: Chicago, Illinois
Height: 6 ft. Weight: 195 lbs.; Married, three children

Education:

Ph.D. in Applied Mathematics, University of New Mexico, 1980
M.S. in Computer Science, Illinois Institute of Technology, 1973
B.S. in Mathematics, Chicago State University, 1972

Professional Societies:

Association for Computing Machinery (ACM)
American Association for the Advancement of Science (AAAS, Fellow)
Institute of Electrical and Electronics Engineers (IEEE, Senior Member)
Society for Industrial and Applied Mathematics (SIAM)

Editor-in-Chief:

International Journal of High-Performance and Applications (1992 - Present)
Netlib (1985 - Present)
SIAM Series on Software, Environments, and Tools for Scientific Computing (1994 - Present)

Awards:

Best Paper Award at SC98 Conference in Orlando Florida in the Systems Category, *Automatically Tuned Linear Algebra Software*, with Clint Whaley.
American Museum of Science and Energy Award Tribute to Tennessee Technology for PVM with A. Geist, 1997.
Fellow of the American Association for the Advancement of Science, 1994
IR-100 Award for PVM 3.2 with A. Beguelin, A. Geist, R. Manchek, and V. Sunderam, 1994

Experience: Distinguished Professor, University of Tennessee and Distinguished Scientist, Oak Ridge

National Laboratory, 1989-present
Visiting Fellow, Oxford University, Oxford England, Summer 1998
Visiting Professor, KTH Royal Institute of Technology, Stockholm, Sweden, Summer 1997
Visiting Professor, Australian National University, Canberra, Australia, Summer 1996
Visiting Scientist, Swiss Scientific Computing Center, Manno, Switzerland, Summer 1995
Visiting Scientist, Danish Technical University, Lyngby, Denmark, Summer 1994
Visiting Scientist, Ecole Normale Supérieure de Lyon, France, Summer 1993
Visiting Professor, ETH, Zurich, Switzerland, Summer 1992
Visiting Scientist, IBM ECSEC, Rome, Italy, Summer 1990
Senior Computer Scientist, Argonne National Laboratory, 1980-1989
Visiting Scientist, AERE Harwell, Didcot, England, Summer 1987
Scientific Director of the Advanced Computing Research Facility, Argonne National Laboratory, 1985-1989
Visiting Position, Center for Supercomputer Research and Development, University of Illinois, Urbana/Champaign, 1985-1987
Visiting Scientist, IBM T. J. Watson Research Center, 1981
Visiting Scholar, Stanford University, 1979
Consultant, Los Alamos Scientific Laboratory, 1978
Research Assistant, University of New Mexico, 1978
Visiting Scientist, Los Alamos Scientific Laboratory, 1977
Assistant Computer Scientist, Argonne National Laboratory, 1975-1980
Research Associate, Argonne National Laboratory, 1974
Resident Student Associate, Argonne National Laboratory, 1973
Undergraduate Honors Participation Program, Argonne National Laboratory, 1973

Professional Services:

Adjunct Professor, Rice University, 1988-present
Vice-Chairman for the ParkBench Activity, 1994-1998
Member, NAS Committee for the Review of DOE Inertial Confinement Fusion Program, 1996-1997
Chairman for the Message Passing Interface Forum 1993-1995
Member, SIAM Council, 1985-1991
Member, NSF Office of Advanced Scientific Computing Advisory Committee, 1987-1990
Adjunct Professor, Northern Illinois University, 1988-1990
Member, ACM SIGNUM Board of Directors, 1985-1989
Chairman, SIAM/SIAG on Supercomputing, 1985-1988

Students Supervised:

Henri Casanova	PhD Computer Science (University of Tennessee), 1998
Rick Phillips	MS Computer Science (University of Tennessee), 1998
Phil Mucci	MS Computer Science (University of Tennessee), 1998
Delphy Nupaver	MS Computer Science (University of Tennessee), 1997
Antoine Petitet	PhD Computer Science (University of Tennessee), 1996
Youngbae Kim	PhD Computer Science (University of Tennessee), 1996
Lorie Liebrock	PhD Computer Science (Rice University), 1994

Richard Barrett	MS Computer Science (University of Tennessee), 1994
Stan Green	MS Computer Science (University of Tennessee), 1994
James Payne	MS Computer Science (University of Tennessee), 1994
Robert Manchek	MS Computer Science (University of Tennessee), 1994
Clint Whaley	MS Computer Science (University of Tennessee), 1993
Brian Larose	MS Computer Science (University of Tennessee), 1993
Majed Sidani	PhD Mathematics (University of Tennessee), 1992
Steve Moulton	MS Computer Science (University of Tennessee), 1992
Mitchell Duitz	MS Computer Science (University of Tennessee), 1991

Editorial Board:

Applied Numerical Mathematics (1994 - Present)

Electronic Transactions on Numerical Analysis (1993 - Present)
IEEE Parallel and Distributed Computing (1994 - 1998)
International Journal of Applied Mathematics (1999 - Present)
International Journal of High Speed Computing (1994 - Present)
Journal of Distributed and Parallel Computing (1988 - Present)
Journal of Numerical Linear Algebra with Applications (1994 - Present)
Journal of Supercomputing (1987 - Present)
Numerical Linear Algebra with Applications (1994 - Present)
Numerical Algorithms (1994 - Present)
Parallel Computing (1987 - Present)
Parallel Processing Letters (1993 - Present)
SIAM Monographs in Mathematical Modeling in Computation (1995 - Present)
SIAM Review (1994 - 1998)

Recent Meetings Helped Organize (1996-1999):

Program Committee	10-th International Parallel Processing Symposium, April 1996, Hawaii.
Program Committee	Eighth IEEE Symposium on Parallel and Distributed Processing, New Orleans, Louisiana October 1996.
Program Committee	15th IMACS World Conference, Berlin, 25-30 August 1997.
Program Committee	NATO School on Parallel Algorithms for the Calculation of Reactivity and Kinetics of Gas Phase Systems, Italy, 1997.
Program Committee	Eighth IEEE Symposium on Parallel and Distributed Processing, New Orleans, Louisiana, October 23-26, 1996.
Steering Committee	6th Symposium on the Frontiers of Massively Parallel Computations, Annapolis, Maryland, October 27-31, 1996.
Program Committee	EURO-PAR'96 ENS-Lyon, France, August 27-29, 1996
Co-Organizer	PARA96 Workshop on Applied Parallel Computing in Industrial Problems and Optimization, Danish Technical University, UNI-C, August 1996.
Workshop organizer	Performance Evaluation Workshop, EURO-PAR'97 meeting August 26-29, 1997, Passau Germany.
Organizing Committee	International Symposium on Supercomputing -- New Horizon of Computational Science, Tokyo (Japan), September 1-3, 1997.
Steering Committee	30th International Symposium on Automotive Technology and Automation (ISATA), Florence, Italy, 16-19 June 1997.
Steering Committee	6th Symposium on the Frontiers of Massively Parallel Computations, Annapolis, Maryland, October 27 - 31, 1996.
Steering Committee	Heterogeneous Computing Workshop Geneva, Switzerland, April 1, 1997.

Program Committee	IEEE Third International Conference on Algorithms And Architectures for Parallel Processing December 8th-12th, 1997, Melbourne Australia.
Program Committee	Massively Parallel Programming Models Workshop, London, England, the Royal Society of Arts, 12th - 14th November 1997.
Co-Organizer	Workshop on Clusters and Computational Grids for Scientific Computing, The Inn at Blackberry Farm, September 2 – 4, 1998, Walton, Tennessee.

Grants received:

NSF, Distributing Mathematical Software via Electronic Networks, NSF-DCR-8419437, $77,487, 1985-1988.
NSF, Summer Institute in Parallel Computing, 2 week institute, NSF-ASC-8703548, $80,000, September 1987.
NSF, Development of a Linear Algebra Library for Supercomputers, NSF-ASC-8715728, $567,875, October 1987-1990.
NSF, Internship in Parallel Computing, NSF-ASC-8714009, $116,461, 1988.
NSF, Summer Institute in Parallel Computing, 2 week institute, NSF-ASC-8803548, $60,000, September 1988.
Air Force Office of Scientific Research, Solving Linear Systems on Multiprocessors, AFOSR-ISSA-860031, $198,043, August 1984-1987.
NSF, Development of a Linear Algebra Library for Supercomputers, NSF-ASC-9005933, $567,875, October 1990-1993.
NASA Goddard Space Flight Center, National Software Exchange, NASA NAG-2083, 1992, $50,000.
DEC, equipment grant for $90,000, May, 1993.
NSF/ARPA, MPI Travel Grant, ASC-9310330, $40,000, in 1993.
NSF, Distribution of Research Software via Netlib, NSF-ASC-9103853, $58,503, April 1991-1994.
ARPA contract through the Army Research Office, contract DAAL03-92-G-293, ASSERT program Using Fortran D to Implement the Scalable Parallel Library for Numerical Linear Algebra, 1992-1994, $161,000.
NSF, Science and Technology Center, Center for Research on Parallel Computation, NSF-8809615, $130,000 per year 1989-1992, \$295,000 per year 1993-1998.
ARPA contract through the Army Research Office, Scalable Parallel Library for Numerical Linear Algebra, Army DAAL03-91-C-0047. $3,225,000, August 1991-December 1995.
ARPA contract through the Army Research Office, Xnetlib Project, Army DAAL03-92-G-0284, $880,000, August 1992-1995.
NSF, CISE Institutional Infrastructure Program grant CDA-9115428, An Experimental Research Facility for Parallel Computing at the University of Tennessee, $1,400,000, January 1992-1997.
NSF, US-France Cooperative Research Cooperative Science CNRS-NSF-1992 Grant, NSF INT-9121334, $15,000, April 1992-1995.
DOE, Martin Marietta PICS, DOE HPCRC project at Oak Ridge National Laboratory, $100,000 in 1992, $129,000 in 1993,
Hewlett-Packard, equipment grant for $100,000, April 1994.
NSF, High-Performance Concurrent Network Computing, joint with Emory University, ASC-9214149, $403,000, September 1993 - 1996.
Sun Microsystems, equipment grant for $100,000, May 1994.
DOD, Benchmarking, joint with ORNL and UT, $250,000, October 1994 – December 1994.
NSF, Distribution of Research Software via Netlib, $212,617, 1994-1997.
DARPA/Army, Continuation Scalable Parallel Library for Numerical Linear Algebra, Army Proposal 34387-MA, $2,700,000, December 1994-April, 1998.
NASA, National HPCC Software Exchange, joint with Rice, Syracuse, Caltech, and Argonne, NASA-NAG 5-2736, $114,218 per year, October 1994 - 1997.

NSF, LAPACK Project, $47,262 per year, September 1, 1994 - August 31, 1997.
DOE, LAPACK Project, $46,080 per year, July 1, 1994 - June 30, 1997.
DARPA/ARO, Mechanisms for Adaptable and Efficient Information Retrieval Clients and Servers, joint with Bell Labs, and NIST, Army Proposal, $1,333,000, July 1995—July 1998.
Army Research Office/DARPA, ASSET, ARMY DAAH04-95-1-0504, $82,000, August 1, 1995 - July 31, 1998.
NASA, PVM and ATM $100,000, Joint wiht CMU for equipment.
NSF, $20,000, U.S.-France (INRIA) Cooperative Research: Tools for Portable and Efficient Parallel Scientific Software. 6/1/97 - 5/31/99.
DOD, Nichols Research Corporation, $138,592, High Performance Computing Modernization Program (ASC), 6/17/96 - 5/13/99.
DOD, Nichols Research Corporation, $146,427, High Performance Computing Modernization Program (CEWES), 6/3/96 - 5/1/99.
Lockheed Martin Missiles and Space, $40,000. System Simulation Network Executive Task Report, 1/15/97 - 3/15/98.
DOE, ASCI Los Alamos National Laboratory, $159,058, 2/3/97 - 2/2/98.

Journal Publications

1. *Unrolling Loops in Fortran*, J. Dongarra and A. R. Hinds, Software--Practice and Experience, 9:219-226, 1979.

2. *Improving the Accuracy of Computed Eigenvalues and Eigenvectors*, J.J. Dongarra, C. B. Moler and J. H. Wilkinson, SIAM Num. Anal., 20(1):23-45, 1982.

3. *Algorithm 589, SICEDR: A FORTRAN Subroutine for Improving the Accuracy of Computed Eigenvalues*, J.J. Dongarra, ACM TOMS, 8(4):371-375, December 1982.

4. *Improving the Accuracy of Computed Singular Values*, J.J. Dongarra, SIAM Scientific and Stat. Computation, 4(4), December 1983.

5. *The Eigenvalue Problem for Hermitian Matrices with Time Reversal Symmetry*, J.J. Dongarra, J. Gabriel, D. D. Koelling, and J. H. Wilkinson, Linear Algebra and Its Applications, 60:27-42, 1984.

6. *Implementing Linear Algebra Algorithms for Dense Matrices on a Vector Pipeline Machine*, J.J. Dongarra, F. G. Gustavson and A. Karp, SIAM Review, 26(1):91-112, January 1984.

7. *Performance of Various Computers Using Standard Linear Equations Software in a Fortran Environment*, J.J. Dongarra, ACM SIGNUM, January 1984.

8. *Solving the Secular Equation Including Spin Orbit Coupling for Systems with Inversion and Time Reversal Symmetry*, J.J. Dongarra, J. R. Gabriel, D. D. Koelling, and J. Wilkinson, Journal for Computational Physics, 54(2), May 1984.

9. *Squeezing the Most out of an Algorithm in Cray Fortran*, J.J. Dongarra, and Stanley C. Eisenstat, ACM TOMS 10(3): 221-230, 1984.

10. *Multiprocessing for Linear Algebra Algorithms on the CRAY X-MP-2: Experiences with Small Granularity*, Steve Chen, J.J. Dongarra, and Christopher C. Hsiung, Journal of Parallel and Distributed Computing, 1:22-31, 1984.

11. *A Collection of Parallel Linear Equations Routines for the Denelcor HEP*, J.J. Dongarra and R. Hiromoto, Parallel Computing, 1(2), 1984.

12. *Performances comparés de 80 ordinateurs sur des programmes Fortran*, J.J. Dongarra, Technique et Science Informatiques, 3(5): 355-360, 1984.

13. *Algorithm Design for Different Computer Architectures*, J.J. Dongarra, Brian T. Smith and Danny Sorensen, IEEE Software, 2(4): 79-80, 1985.

14. *On Some Parallel Banded System Solvers*, J.J. Dongarra and A. H. Sameh, Parallel Computing, 1(3):223-235, 1984.

15. *A Proposal for an Extended Set of Fortran Basic Linear Algebra Subprograms*, Jack Dongarra, Jeremy Du Croz, Sven Hammarling, and Richard J. Hanson, ACM SIGNUM Newsletter, 20(1), 1985.

16. *Implementation of Some Concurrent Algorithms for Matrix Factorization*, J.J. Dongarra, A. H. Sameh, and D. C. Sorensen, Parallel Computing, 3:25-34, 1986.

17. *Implementing Dense Linear Algebra Algorithms Using Multitasking on the CRAY X-MP-4*, J. Dongarra and T. Hewitt, SIAM J. Sci.~Stat.~Comp., 7(1):347-350, January, 1986.

18. *How do the ``Minisupers'' Stack Up*?, J.J. Dongarra, IEEE Computer, p 93, March 1986.

19. *Squeezing the Most Out of High Performance Computers for Finding the Eigenvalues*, J. Dongarra, L. Kaufman, and S. Hammarling, Linear Algebra and Its Applications, 77:113-136, 1986.

20. *A Portable Environment for Developing Parallel Fortran Programs*, Jack Dongarra and Danny Sorensen, Parallel Computing, 5(1): 175-186, 1987.

21. *Solving Banded Systems on a Parallel Processor*, J. Dongarra and L. Johnsson, Parallel Computing, 5(1): 219-246, 1987.

22. *Linear Algebra on High-Performance Computers*, Jack Dongarra and Danny Sorensen, Applied Mathematics and Computation, 20(1\&2), September 1986.

23. *Distribution of Mathematical Software Via Electronic Mail*, Jack Dongarra and Eric Grosse, Comm. of the ACM, 30(5):403-407, May 1987.

24. *An Extended Set of Fortran Basic Linear Algebra Subprograms*, Jack Dongarra, Jeremy Du Croz, Sven Hammarling, and Richard J. Hanson, ACM TOMS, 14(1):1-17, March 1988.

25. *An Extended Set of Basic Linear Algebra Subprograms: Model Implementation and Test Programs*, J. Dongarra, J. Du Croz, S. Hammarling, R. Hanson, ACM TOMS, 14(1):18-32, March 1988.

26. *Evaluating Computers and Their Performance: Perspectives, Pitfalls, and Paths*, J. Dongarra, J. Martin, and J. Worlton, IEEE Spectrum, June 1987.

27. *A Fully Parallel Algorithm for the Symmetric Eigenvalue Problem*, J.J. Dongarra and D. C. Sorensen, SIAM J. of Sci. and Stat. Comp. 8(2):139-154, March 1987.

28. *Programming Methodology and Performance Issues for Advanced Computer Architectures*, J. Dongarra, D. Sorensen, K. Connolly, and J. Patterson, Parallel Computing, 8:41-58, 1988.

29. *LINPACK Benchmark*, Jack Dongarra, Supercomputing, 15-19, Fall 1988.

30. *Tools to Aid in the Analysis of Memory Access Patterns for Fortran Programs*, O. Brewer, J. Dongarra, and D. Sorensen, Parallel Computing, 9:25-35, 1989.

31. *Shopping for Mathematical Software Electronically*, J. Dongarra and E. Grosse, IEEE Potentials, 8:37-39, 1989.

32. *Block Reduction to Tridiagonal and Hessenberg Form for the Eigenvalue Problem*, J. Dongarra, S. Hammarling and D. C. Sorensen, Journal of Computational and Applied Mathematics, 27:215-227, 1989.

33. *A Tool to Aid in the Design, Implementation, and Understanding of Matrix Algorithms for Parallel Processors*, Orlie Brewer, J. Dongarra, Samuel Fineberg, and James Arthur Kohl, Journal of Parallel and Distributed Computing, 9:185-202, 1990.

34. *A Set of Level 3 Basic Linear Algebra Subprograms*, Jack Dongarra, Iain Duff, Jeremy Du Croz, and Sven Hammarling, ACM TOMS, 16(1): 1-17, March 1990.

35. *Algorithm 679: A Set of Level 3 Basic Linear Algebra Subprograms--Model Implementation and Test Programs*, Jack Dongarra, Iain Duff, Jeremy Du Croz, and Sven Hammarling ACM TOMS, 16(1): 18-28, March 1990.

36. *Parallel Loops A Test Suite for Parallelizing Compilers: Description and Example Results*, Jack Dongarra, Mark Furtney, Steve Reinhardt and Jerry Russell, Parallel Computing, 17(2): 1247-1257, 1991.

37. *A Comparative Study of Automatic Vectorizing Compilers*, Jack Dongarra, David Levine and David Callahan, Parallel Computing, 17(2): 1223-1246, 1991.

38. *Numerical Considerations in Computing Invariant Subspaces*, Jack Dongarra, Sven Hammarling and James Wilkinson, SIAM Matrix Analysis and Applications, January, 1992.

39. *Opening the Door to Heterogeneous Network Supercomputing*, Adam Beguelin, Jack Dongarra, Al Geist, Robert Manchek, and Vaidy Sunderam, Supercomputing Review, 4(9):44-45, 1991.

40. *Gordon Bell Prize Lectures*, J. Dongarra, A.Karp, K. Miura, and H.D. Simon, IEEE Software, August 1991.

41. *The IBM RISC System/6000 and Linear Algebra Operations*, Jack Dongarra, Peter Mayes and Giuseppe Radicati di Brozolo, Supercomputer, 44(VIII-4): 15-30, 1991.

42. *Generalized QR Factorization and Its Applications*, Ed Anderson, Z. Bai, and J. Dongarra, Linear Algebra and Its Applications, 162-164:243-273, 1992.

43. *Reduction to Condensed Form for the Eigenvalue Problem on Distributed Memory Architectures*, Jack Dongarra and Robert van de Geijn Parallel Computing, 18, 973-982, 1992.

44. *Fortran Subroutines for Computing the Eigenvalues and Eigenvectors of a General Matrix by Reduction to General Tridiagonal Form*, J.J. Dongarra, G. A. Geist, and C. H. Romine, ACM TOMS, Volume 18, Number 4, Dec 1992, pp 392-400.

45. *A Parallel Algorithm for the Non-Symmetric Eigenvalue Problem*, Jack Dongarra and Majed Sidani, SIAM Journal on Scientific Computing, Volume 14, Number 3, May, 1993, pp 542-569.

46. *Performance of Various Computers Using Standard Sparse Linear Equations Software in a Fortran Environment*, Jack Dongarra and Henk van der Vorst, Supercomputer, 45, 1992.

47. *Linear Algebra Libraries for High-Performance Computers: A Personal Perspective*, Jack Dongarra, IEEE Parallel and Distributed Technology: Systems and Applications, pp 17-25, Volume 1, Number 1, February 1993.

48. *Visualization and Debugging in a Heterogeneous Environment*, A. Beguelin, J. Dongarra, A. Geist, and V. Sunderam, IEEE Computer, Volume 26, Number 6, pp 88-95, June 1993.

49. *Integrated PVM Framework Supports Heterogeneous Network Computing*, Jack Dongarra, Al Geist, Robert Manchek, and Vaidy Sunderam, Computers in Physics, April 1993, Volume 7, Number 2, pp 166-175.

50. *Performance of LAPACK: A Portable Library of Numerical Linear Algebra Routines*, Ed Anderson and Jack Dongarra, Proceedings of the IEEE, August 1993, Volume 81, Number 8, pp 1094-1102.

51. *Supporting Heterogeneous Network Computing: PVM*, Jack Dongarra, Al Geist, Robert Manchek, and Vaidy Sunderam, Chemical Design Automation News, September/October 1993, Volume 8, Number 9/10, pp 36-42.

52. *The PVM Concurrent Computing System: Evolution, Experiences, and Trends*, V. Sunderam, J. Dongarra, A. Geist, and R Manchek, Parallel Computing, Volume 20, Number 4, April 1994, pp 531-547.

53. *CRPC Research into Linear Algebra Software for High-Performance Computers*, J. Choi, J. Dongarra, R. Pozo, D. Sorensen, and D. Walker, International Journal of Supercomputing Applications, Volume 8, Number 2, Summer 1994, pp 99-118.

54. *PUMMA: Parallel Universal Matrix Multiplication Algorithms on Distributed Memory Concurrent Computers*, J. Choi, J. Dongarra, and D. Walker, Concurrency: Practice and Experience, Volume 6, Number 7, October 1994, pp 543 - 570.

55. *The Message Passing Interface*, International Journal of Supercomputing Applications, Volume 8 Number 3/4, Fall/Winter 1994.

56. *HeNCE: A Heterogeneous Network Computing Environment*, J. Dongarra, A. Beguelin, A. Geist, and R. Manchek, Scientific Programming, Volume 3, Number 1, pp 49-60.

57. *Public International Benchmarks for Parallel Computers, Parkbench Committee Report-1*, R. Hockney and M. Berry (Eds.) Scientific Programming, Volume 3, Number 2, pp 101-146, 1994.

58. *PDS: A Performance Database Server*, M. W. Berry, J. Dongarra, B. H. Larose, and Todd Letsche, Scientific Programming, Volume 3, Number 2, pp 147—156, 1994.

59. *Scalability Issues in the Design of a Library for Dense Linear Algebra*, Jack Dongarra, Robert van de Geijn and David Walker, Journal of Parallel and Distributed Computing, Volume 22, Number 3, pp 523-537, Sept. 1994.

60. *Software Libraries for Linear Algebra Computations on High Performance Computers*, Jack Dongarra and David Walker, SIAM Review, Volume 37, Number 2, pp 151—180, June 1995.

61. *Software Distribution Using XNETLIB*, J. Dongarra, T. Rowan and R. Wade, ACM Transactions on Mathematical Software, Volume 21, Number 1, pp 79-88, March 1995.

62. *Recent Enhancements to PVM*, A. Beguelin, J. Dongarra, A. Geist, B. Manchek, and V. Sunderam, International Journal for Supercomputer Applications, Volume 9, Number 2, Summer 1995, pp 108-127.

63. *Experiences with CODE and HeNCE in Visual Programming for Parallel Computing*, J.C. Browne, J. Dongarra, S.I. Hyder, K. Moore, and P. Newton, IEEE Parallel and Distributed Technology, Volume 3, Number 1, pp 75-83, Spring, 1994.

64. *Performance Complexity of LU Factorization with Efficient Pipelining and Overlap on a Multiprocessor*, F. Desprez, J. Dongarra, and B. Tourancheau, Parallel Processing Letters, Volume 5, Number 2, 1995.

65. *National HPCC Software Exchange*, Shirley Browne, Jack Dongarra, Stan Green, Keith Moore, Tom Rowan, Reed Wade, Geoffrey Fox, Ken Hawick Ken Kennedy, Jim Pool, Rick Stevens, Bob Olsen, and Terry Disz, IEEE Computational Science and Engineering, Volume 2, Number 2, 62-69, 1995.

66. *Top500 Supercomputer Sites*, J. Dongarra, H. Meuer and E. Strohmaier, Supercomputer, pp 133-194, Volume 11, Number 2-3, June 1995.

67. *The ParkBench Benchmark Collection*, Jack Dongarra and Tony Hey, Supercomputer, pp 94-115, Volume 11, Number 2-3, June 1995.

68. *The Design of a Parallel, Dense Linear Algebra Software Library: Reduction to Hessenberg, Tridiagonal, and Bidiagonal Form*, Jaeyoung Choi, Jack Dongarra, and David Walker, Numerical Algorithms, Volume 10, Number 3 and 4, 1995, pp 379-400.

69. *A Highly Parallel Algorithm for the Reduction of a Nonsymmetric Matrix to Block Upper-Hessenberg Form*, Michael W. Berry, Jack Dongarra, and Youngbae Kim, Parallel Computing, Vol 21, No 8, August, 1995, pp 1189-1212.

70. *Parallel Matrix Transpose Algorithms on Distributed Memory Concurrent Computers*, Jaeyoung Choi, Jack Dongarra, and David Walker, Parallel Computing, pp 1387-1405, Volume 21, 1995.

71. *The Netlib Mathematical Software Repository*, Shirley Browne, Jack Dongarra, Eric Grosse, and Tom Rowan, D-Lib Magazine, September 1995. Electronic Journal, http://www.cnri.reston.va.us/home/dlib/september95/09contents.html

72. *MPI: A Standard Message Passing Interface*, Jack Dongarra and David Walker, Supercomputer, January, Volume 12, Number 1, 1996, pp 56-68.

73. *Chebyshev tau - QZ Algorithm Methods for Calculating Spectra of Hydrodynamic Stability Problems*, J. Dongarra, B. Straughan and D.W. Walker, Journal of Applied Numerical Mathematics, Volume 22 Number 4, (1996), 399-435.

74. *Algorithmic Bombardment for the Iterative Solution of Linear Systems: A Poly-Iterative Approach*, Richard Barrett, Michael Berry, Jack Dongarra, Victor Eijkhout, and Charles Romine, Journal of Computational and Applied Mathematics, Volume 74 Number 1-2, 1996, 91-110.

75. *LAPACK for Fortran90*, J. Dongarra, J. DuCroz, S. Hammarling, J. Wasniewski, A. Zemla, Appl. Math and Comp. Sci., Vol 6, No 2, 1996, pp 101-109.

76. *PVMPI: An Integration of PVM and MPI Systems*, Graham Fagg and Jack Dongarra, Calculateurs Paralleles, Volume 8, Number 2, 1996, pp 151-166, Hermes, ISSN: 1260-3198.

77. *Future Linear Algebra Libraries*, Jack Dongarra, IEEE Computational Science and Engineering, Summer 1996, Volume 3, Number 2, pp 38-40.

78. *ScaLAPACK: A Portable Linear Algebra Library for Distributed Memory Computers - Design Issues and Performance*, J. Choi, J. Demmel, J. Dongarra, I. Dhillon, S. Ostrouchov, A. Petitet, K. Stanley, D. Walker, and R. C. Whaley, Computer Physics Communication, 97 (1996) 1-15, ISSN: 0010-4655.

79. *Overview of High-Performance Computers*, Ad van der Steen and J. Dongarra, Volume 1, Number 1. 1996, Electronic Journal of the NHSE Review, http://nhse.cs.rice.edu/NHSEreview/96-1.html.

80. *The Design and Implementation of the ScaLAPACK LU, QR, and Cholesky Factorization Routines*, Jaeyoung Choi, J. Dongarra, S. Ostrouchov, A. Petitet, R. Whaley, and David Walker, Scientific Programming, Volume 5, pp 173-184, 1996.

81. *A Message Passing Standard for MPP and Workstations*, J. Dongarra, S. W. Otto, M. Snir, and D. Walker, Communication of the ACM, pp 84-90, July 1996, Volume 39, Number 7.

82. *PB-BLAS: A Set of Parallel Block Basic Linear Algebra Subroutines*, J. Choi, J. Dongarra, and D. Walker, Concurrence: Practice and Experience, Volume 8, Number 7, pp 517-535, September 1996.

83. *Key Concepts for Parallel Out of Core LU Factorization*, J. Dongarra, S. Hammarling and D. Walker, Parallel Computing, pp 49-70, Volume 23, Number 1-2, April 1997.

84. *Changing Technologies of HPC*, J. Dongarra, H.W. Meuer, H.D. Simon, and E. Strohmaier, pp 461-474, Future Generation Computer Systems, Volume 12, Number 5, April 1997, ISSN 0167-739X.

85. *Top500 Supercomputer Sites*, J. Dongarra, H.W. Meuer and E. Strohmaier, pp 89-120, Supercomputer, Number 67, 1997, ISSN 0168-7875.

86. *Fault Tolerant Matrix Operations for Networks of Workstations Using Diskless Checkpointing*, J. Plank, Y. Kim, and J. Dongarra, Journal of Parallel and Distributed Computing, Volume 43, Number 2, pp. 125-138, 1997.

87. *The Spectral Decomposition of Nonsymmetric Matrices on Distributed Memory Computers*, J. Bai, J. Demmel, J. Dongarra, A. Petitet, H. Robinson, and K. Stanley, SIAM Journal on Scientific Computing, Volume 18, Number 5, pp 1446-1461, 1997, ISSN 0196-5204.

88. *Practical Experience in the Numerical Dangers of Heterogeneous Computing*, L. S. Blackford, A. Cleary, J. Demmel, J. Dongarra, I. Dhillon, S. Hammarling, A. Petitet, H. Ren, K. Stanley, and R. C. Whaley, ACM Transaction on Mathematical Software, Volume 23, Number 2, pp 133-147, June 1997.

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