**CURRICULUM VITAE**
David A. Patterson
E.H. and M.E. Pardee Professor of Computer Science
Computer Science Division
Department of Electrical Engineering and Computer Sciences
University of California
Berkeley, California 94720

## Education

Ph.D. Computer Science, 1976, UCLA
A.B. Mathematics, 1969

## Experience

University of California, Berkeley
Department of Electrical Engineering and Computer Sciences

7/92 to present: E.H. and M.E. Pardee Professor of Computer Science

7/85 to 6/92: Professor

7/81 to 6/85: Associate Professor

1/77 to 6/81: Assistant Professor

10/98 to 10/00: Chief Scientist, Sun Microsystems, Inc.
Network Attached Storage Division

8/89 to 12/89: Scientist, Thinking Machines Corporation, Cambridge, MA
Leave of absence to work on Connection Machine-5

9/79 to 12/79: Principal Engineer, Digital Equipment Corp.
Distributed and Mid-Range Advanced Systems Development, design of higher level microprogramming tools for VAX computers

2/72 to 12/76: Member of the Technical Staff, Hughes Aircraft Company
Data Systems Division, Advanced Projects Laboratory Design of instruction set, CPU architecture, microprogram, microprogram algorithms, microprogramming language and compiler, and microlevel architecture for an aerospace minicomputer. Worked on microcomputer applications, bit slice computers, microprogramming commercial minicomputers, and performance evaluation using a hardware monitor

## Honors and Awards

1.  UCLA Engineering Award, Outstanding Academic Alumni, 2009

2.  MT Connect IMTS, Dinner in honor of David A Patterson's work, 2008

3.  AAAS Fellow, 2008

4.  Computer History Museum Hall of Fame, 2008

5.  ACM-IEEE Eckert Mauchly Award, 2008

6.  EECS U.C. Berkeley Technical Achievement Award, 2008

7.  ACM Distinguished Service Award, 2007

8.  Fellow of the American Association for the Advancement of Science, 2007

9.  Fellow of the Computer History Museum, 2007

10. Winner of Inaugural Katayanagi Prize for Research Excellence, 2007

11. Member of the National Academy of Sciences, 2006

12. Fellow of the American Academy of Arts and Sciences, 2006

13. Computing Research Association Distinguished Service Award, 2006

14. Upsilon Pi Epsilon Abacus Award, 2006

15. Member of the Silicon Valley Engineering Hall of Fame, 2005

16. Certificate of Congressional Recognition from Congressman Michael Honda, 2005

17. NEC Foundation for Computers & Communication Promotion ("C&C") Prize, 2004

18. Lifetime National Associate of the National Academies, 2002

19. IEEE James H. Mulligan, Jr., Education Medal, 2000

20. IEEE von Neumann Medal, 2000

21. IEEE Johnson Award for Storage Technology, 1999

22. SIGMOD Test of Time Award, 1998

23. UC Berkeley EECS Diane McIntyre Award for Distinguished Teaching, 1998

24. IEEE Undergraduate Teaching Award, 1996

25. IEEE Computer Society Award for Outstanding and Innovative Contributions to the Fields of Computer and Information Science, 1995

26. Outstanding Alumnus Award of UCLA Computer Science Department, 1994

27. Fellow of the Association for Computing Machinery (ACM), 1994

28. Member of the National Academy of Engineering, 1993

29. Karl V. Karlstrom Outstanding Educator Award, ACM, 1991

30. Fellow of the IEEE, 1989

31. Corporate Fellow, Thinking Machines Corporation, 1989

32. Senior Member of the IEEE, 1988

33. Distinguished Teaching Award, Berkeley Division of the U.C. Academic Senate and the California Alumni Association, 1982

34. U.C. Regents Summer Faculty Fellowship, 1977

35. Hughes Full-time Doctoral Fellowship 1974-75, 1975-76

## Advisory Boards

1.  SUN, Technical Advisory Board Member and Consultant

2.  Microsoft, Consultant to Research and Board Member on ALT-Technical Advisory

3.  Trustworthy Computing Academic Advisory Board

4.  Sun Microsystems, Member of Technical Advisory Board, 2005-present

5.  Microsoft, Member of Trustworthy Computing Academic Advisory Board, 2003-present

6.  Microsoft Research, Member of Advisory Board, 2007-present

7.  Kazaeon, Member of Technical Advisory Board, 2003-2007

8.  Azul Systems, Member of Technical Advisory Board, 2003-2005

9.  Sanera, Member of Technical Advisory Board, 2000-2003

10. Scale8, Chief Scientist and Member of Technical Advisory Board, 1999-2003

11. Data General Corporation, Member of the Scientific Advisory Board, 1984-1992

**<u>Consulting</u>**

1/84 to 2010:    Sun Microsystems Inc. (computer architecture strategic directions)

5/88 to 6/93:    Thinking Machines Corporation (massively parallel computer systems)

7/82 to 6/84:    Xerox Palo Alto Research Center (computer architectures for Smalltalk)

7/80 to 6/82:    Intel Corporation (VLSI computer architectures)

1/80 to 6/80:    Digital Equipment Corp., Distributed and Mid-Range Advanced Systems Dev.,
                 consulting on higher level microprogramming tools for VAX computers

3/78 to 6/79:    Hewlett-Packard, General Systems Division
                 Providing tools to move operating systems functions into microcode

**Keynote Addresses and Distinguished Lectures**

1. Keynote Speaker: "An Overview of Research at the UCB Par Lab", VECPAR'10 High Performance Computing for Computational Science, June 2010.

2. Keynote Speaker: "Cloud Computing & RAD Lab", Microsoft Cloud Futures, Redmond, April 2010.

3. Keynote Speaker: "Software Knows Best", WOSP/SIPEW International Conference on Performance Engineering, January 2010.

4. Keynote Speaker: "The Parallel Revolution Has Started", EE Times Virtual Conference, October 2009.

5. Keynote Speaker: "The Parallel Revolution Has Started", Nokia Lab, CITRIS, October 2009.

6. Keynote Speaker: "Applying Machine Learning to Systems Management", The IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO 2009), San Francisco CA, September 2009.

7. Keynote Speaker:  "The Parallel Revolution Has Started", The International Conference on Microelectronic Systems Education (MSE), July 2009.

8. Keynote Speaker: ""The Parallel Revolution Has Started: Are You Part of the Solution or Part of the Problem?", The International Conference on Microelectronic Systems Education (MSE), San Francisco CA, July 2009.

9. Distinguished Lecture: "The Parallel Revolution Has Started: Are You Part of the Solution or Part of the Problem?", Triangle Lecture Series (Duke, USC, and NCU Universities), April 2009.

10. Distinguished Lecture: "The future of Parallel Programming", University of Illinois @ Parallel Laboratory, April 2009.

11. Keynote Speaker: "Making a Difference – Leadership Through Innovation", HKN General Meeting, November 2008.

12. Distinguished Lecture: "The Parallel Computing Landscape: A Berkeley View 2.0", Supercomputing Workshop, November 2008.

13. Keynote Speaker: "The Parallel Computing Landscape: A Berkeley View 2.0", World Comp 08, Las Vegas NV, July 2008.

14. Distinguished Lecture: "Grand Challenges and Great Teams", Eckert-Mauchly Award, Beijing, China, June 2008.

15. Keynote Speaker: "The Parallel Revolution Has Started: Are You Part of the Solution or Part of the Problem?", USENIX Conference, Boston MA, June 2008.

16. Keynote Speaker: "Towards a Declarative Datacenter with a Scalable Store." Microsoft Distributed Computing and Datacenter Seminar, May 2008.

17. Distinguished Lecture: "The Parallel Computing Landscape: A Berkeley View 2.0" AMD Distinguished Speaker Series, May 2008.

18. Distinguished Lecture: "Towards a Declarative Datacenter with a Scalable Store" Stanford's Clean Slate Seminar, Palo Alto CA, May 2008.

19. Distinguished Lecture: "Has Utility Computing Business Model Been Found (Finally)?", Sun Microsystems, March 2008.

20. Distinguished Lecture: "Towards a Declarative Datacenter with a Scalable Store," Distributed Computing and Storage Workshop, Microsoft, Redmond WA, January 2008.

21. Distinguished Lecture: "The Landscape of Parallel Computing Research: A View From Berkeley", University of Waterloo, Waterloo, Ontario Canada, October 2007.

22. Distinguished Lecture: "The Landscape of Parallel Computing Research: A View From Berkeley", IBM T.J. Watson, Yorktown Heights NY, October 2007.

23. Keynote Speaker: "The Parallel Computing Landscape: A Berkeley View", ISLPED (the Intl Symposium on Low Power Electronics & Design), August 2007.

24. Distinguished Lecture: "Longevity, its widespread use, and N2 performance on parallel kernels", SPARC, August 2007.

25. Keynote Speaker: "The Landscape of Parallel Computing Research: A View from Berkeley", 2.0, Manycore Computing Workshop, June 2007.

26. Distinguished Lecture, "The Berkeley View: A New Framework and a New Platform for Parallel Research," Carnegie Mellon University, Pittsburgh PA, March 2007.

27. Distinguished Lecture, "The Berkeley View: A New Framework and a New Platform for Parallel Research," Tokyo University of Technology, Tokyo Japan, March 2007.

28. Distinguished Lecture: "The Berkeley View: A New Framework and a New Platform for Parallel Research," PARC Forum, Palo Alto CA, November 2006.

29. Keynote Speaker: "The Berkeley View: A New Framework and a New Platform for Parallel Research," LCPC New Orleans, November 2006.

30. Keynote Speaker: "Creating a Thriving Manufacturing Base in 21st Century America", Association of Manufacturing Technology Annual Meeting, Lake Las Vegas NV, October 2006.

31. Keynote Speaker: "The RADical Approach to Next-Generation Information Services: Reliable, Adaptive, Distributed," ACM SIGMOD/PODS 2006 Conference, Chicago Illinois, June 2006.

32. Keynote Speaker: "Time to make concurrency RAMPant: a community vision for a shared experimental parallel hardware-software platform," Multicore Expo, Santa Clara California, March 2006.

33. Keynote Speaker: "RAMP: Research Accelerator for Multiple Processors - A Community Vision for a Shared Experimental Parallel HW/SW Platform," IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS-2006), Austin Texas, March 2006.

34. Keynote Address: "RAMP: Research Accelerator for Multiple Processors," WARFP-2006: 2nd Workshop on Architecture Research using FPGA Platform, Austin TX, February 2006.

35. Samuel D. Conte Distinguished Lecture: "How to Hurt Scientific Productivity," Purdue University, February 2006.

36. Keynote Address: "Making Concurrency RAMPant," IBM Almaden Academy Conference, San Jose CA, February 2006.

37. Keynote Address "+30 Years of IBM / U.C. Berkeley Synergy in Research," IBM Almaden Research 60th Anniversary Conference, San Jose CA, October 2005.

38. Keynote Address: "Why Latency Lags Bandwidth, and What It Means to Computing," 8th High Performance Embedded Computing Conference, MITRE, Boston, MA, September 2004.

39. Keynote Speaker: "Latency Lags Bandwidth," IBM Almaden Academy Performance Engineering Best Practices Conference, San Jose, California, June 2004.

40. Distinguished Lecturer: "Recovery Oriented Computing," Louisiana State University, February 2004.

41. Distinguished Lecturer: "Future Directions of Computer Engineering," William A. Anthony Lecture, Cornell University, November 2003.

42. Distinguished Lecturer: "Recovery Oriented Computing" Texas A&M University, October 2003.

43. Distinguished Lecturer: Organick Memorial Lecture, University of Utah, April 2003.

44. Distinguished Lecturer: State University of New York at Stony Brook, Stony Brook NY, February 2003.

45. Distinguished Lecturer:  Santa Clara University, Santa Clara CA, January 2003.

46. Distinguished Lecturer:  University of Michigan, Ann Arbor, MI, November 2002.

47. Distinguished Lecturer:  "Recovery Oriented Computing (ROC)"; University of Illinois, Champaign-Urbana IL, October 2002.

48. Keynote speaker:  "Embracing Failure:  Recovery Oriented Computing (ROC)." Conference on High Speed Computing 02, Glendon Beach OR, April 2002.

49. Keynote speaker:  "Recovery Oriented Computing: A New Research Agenda for a New Century."  8th International Symposium on High-Performance Computer Architecture (HPCA 8), Boston MA, February 2002.

50. Keynote speaker:  "Availability and Maintainability Performance:  New Focus for a New Century."  USENIX FAST 02 Conference on File and Storage Technologies, Monterey CA, January 2002.

51. Keynote speaker:  "Embracing Failure:  A Case for Repair Centric Design."  High Performance Transaction Systems Workshop, Asilomar CA, October 2001.

52. Keynote Speaker:  2001 International Parallel and Distributed Processing Symposium, San Francisco CA, April 2001.

53. Distinguished Lecturer: "Computers for the PostPC Era."  University of Utah, March 2001.

54. Distinguished Lecturer: "Computers for the PostPC Era."   University of California, Davis, November 2000.

55. Distinguished Lecturer: "Computers for the PostPC Era." University of Wisconsin, Madison, October 2000.

56. Distinguished Lecturer: "Computers for the PostPC Era."   University of Virginia, October 1999.

57. Distinguished Lecturer: "Computers for the PostPC Era."  University of Oregon, 1999.

58. Keynote Speaker: The ACM SIGMOD International Conference on Management of Data, 1998.

59. Distinguished Lecturer, Stanford Computer Science Colloquium, 1998.

60. Keynote Speaker: The Second International Workshop on SCI-based Low-cost/High-performance Computing (SCIzzl-2), 1995.

61. Keynote Speaker: The ACM SIGMETRICS Conference, 1993.

62. Keynote Speaker: The International Conference On Parallel And Distributed Information Systems, 1993.

63. Keynote Speaker: The Programmed Logic Devices Design Conference, 1993.

64. Distinguished Lecturer: National Academy of Science (Beijing, China), 1994.

65. Distinguished Lecturer, Cornell University, 1993.

66. Distinguished Lecturer, University of Arizona, 1993.

67. Distinguished Lecturer, University of Maryland, 1993.

68. Distinguished Lecturer, University of Minnesota, 1993.

69. Distinguished Lecturer, University of Wisconsin. 1993.

70. Distinguished Lecturer, Georgia Institute of Technology, 1992.

71. Distinguished Lecturer, University of Chicago, 1992.

72. Distinguished Lecturer, University of Texas, 1992.

73. Distinguished Lecturer, Carnegie-Mellon University, 1992.

74. Distinguished Lecturer, Duke University, 1992.

75. Distinguished Lecturer, Massachusetts Institute of Technology, 1992.

76. Distinguished Lecturer, Princeton, 1992.

77. Distinguished Lecturer, University of Southern California, 1992.

78. Distinguished Speaker, Computer Forum Lecture Series, Stanford University, 1983.

79. ACM National Lecturer, 1981-82.

80. Distinguished Speaker: Computer Forum Lecture Series, Stanford University. 1980-81.

81. ACM National Lecturer, 1980-81.

## University Service

Academic Senate, Committee on Teaching, 2008-2010

Founding Director, Parallel Computing Lab (Par Lab), 2007 to present

Founding Director, Reliable Adaptive Distributed Computing Lab (RAD Lab), 2005 to present

Academic Senate, Committee on Budget and Interdepartmental Relations, 2001 to 2004

Associate Chair of Computer Science Division, EECS Department, 1990 to 1993

Academic Senate, Committee on Teaching, 1986-1989

## Professional Service via Leadership Positions

Elected as Member of Board of RH CACM, 2008 to present

CACM, C0-Chair, Research Highlights Board, 2008 to present

Past President, Association for Computing Machinery, 2006 to 2008

Member, President's Council of Advisors on Science and Technology (PCAST), Technical Advisory Group on Networking and Information Technology, 2006 to present

Elected as President of the Association for Computing Machinery, 2004 to 2006

Member, President's Information Technology Advisory Committee (PITAC), 2003 to 2005

Member, Committee on Membership of the National Academy of Engineering, 2003 to 2006

Member, Computer Science and Telecommunications Board, National Research Council, 1998-2003

Elected as Chair of the Computing Research Association, 1993 to 1997

Elected as Member of Board of the Computing Research Association, 1991 to 2003

Elected as Chair of the ACM Special Interest Group in Computer Architecture, 1993 to 1995

Program Co-Chair, IEEE HOT chips Symposium IV, August 9-11, 1992, Stanford, CA

Chair of the Program Committee, Fourth Symposium on Architectural Support for Operating Systems and Computer Architecture, Santa Clara, CA., April, 1991

Elected as Director, ACM Special Interest Group on Computer Architecture, 1987 to 91

Guest Editor, Special Issue on Computer Architecture, Communications of the Association for Computing Machinery (CACM), January 1985

Editor, Journal of VLSI and Computer Systems, 1986 to 88

Chair of the 1982 ACM-IEEE Eckert-Mauchly Award Committee (Lifetime Award - Computer Architecture)

## Professional Services via Committee Memberships

- CACM RH Board Committee Member

- Communications of the ACM, Co-Chair, Research Highlights Editorial Board

- Gigascale Systems Research Center (GSRC), Advisory Board

- Member of the Program Committee, The 32nd Annual International Symposium on Computer Architecture (ISCA) 2005

- Member of the Program Committee, The 3$^{rd}$ USENIX Conference of File and Systems Techonologies (FAST'04) 2004

- Member of the Program Committee, The 30th Annual International Symposium on Computer Architecture (ISCA) 2003

- Member of the Program Committee, The 1st USENIX Conference of File and Systems Techonologies (FAST'02) 2002

- Member, IEEE Von Neumann Medal Committee, 2002 to 2004

- Member, IEEE Mulligan Education Medal Committee, 2002 to 2003

- Member, Computing Research Association Awards Committee, 2001

- Member, Computing Research Association Government Affairs Committee, 2001

- Member of the Program Committee, Fifth International Symposium on High Performance Computer Architecture, 1999

- Member of the Program Committee, The 24th Annual International Symposium on Computer Architecture, 1997

- Member of the Program Committee, 21st Annual ACM-IEEE International Symposium on Computer Architecture, Chicago, Illinois, April, 1994

- Member, ACM Distinguished Fellow Committee, New York, 1993

- Member, Evaluation Committee, Graduate Program in Dept. of Computer Science &

Engineering, University of California at San Diego, 1992

- Member, Committee to evaluate computer science research and higher education at Norwegian universities (Bergen, Oslo, Trondheim and Tromso), for NAVF: The Norwegian Council for Natural Science Research, 1992

- Member, NASA Management Operations Working Group (MOWG), Washington, D.C., 1992 to 1994

- Member of the Editorial Board, IEEE Spectrum, 1990 to 1992

- Member, Committee to Study the Scope and Role of Computer Science, National Academy of Sciences, 1990 to 1992

- Member of the Program Committee, 18th Annual ACM-IEEE International Symposium on Computer Architecture, Toronto, Canada, June, 1991

- Member of Program Committee, IEEE HOT chips Symposium II, August 20-21 1990, Santa Clara, CA

- Member of the Program Committee, 17th Annual ACM-IEEE International Symposium on Computer Architecture, Seattle, WA., May, 1990

- Member of the Program Committee, Third Symposium on Architectural Support for Operating Systems and Computer Architecture, Boston, MA. , April, 1989

- Member of the Program Committee, 31st Annual International Solid-State Circuits Conference, (ISSCC '84), February, 1984, San Francisco

- Member of the Program Committee and Session Chair, 22nd Annual *IEEE Computer* Conference (Spring COMPCON '84), February, 1984, San Francisco

- Member of the Program Committee, Session Chair, and Panel Participant 30th Annual International Solid-State Circuits Conference, (ISSCC '83), February, 1983, New York

- Member of the Program Committee and Session Chair, 21st Annual *IEEE Computer* Conference (Spring COMPCON '83), February, 1983, San Francisco

- Member of the Program Committee and Session Chair, 10th ACM-IEEE International Symposium on Computer Architecture, June 13-16, 1983, Stockholm, Sweden

- Member of the Program Committee, Session Chair, and Panel Participant; 1st Symposium on Architectural Support for Programming Languages and Operating Systems, March 1-3, 1982, Palo Alto, California

- Member of the Program Committee, Session Chair, and Panel Participant; 9th International Symposium on Computer Architecture, April 26-29, 1982, Austin, Texas

- Member of the Program Committee, 9th Annual Workshop on Microprocessors, April 21-23, 1982, Pacific Grove, California

- Member of the Program Committee, 20th Annual *IEEE Computer* Conference (Spring COMPCON '82), February *23-25,* 1982, San Francisco

- ACM Representative of the Eckert-Mauchly Award Committee (Lifetime Award for Contributions Computer Architecture), 1980-1981

- Member of the Program Committee, 8th Annual Workshop on Microprocessors, April 21-23, 1981, Pacific Grove, California

- Member of the IEEE Subcommittee on a Microcomputer Standard for Binary Floating-Point Arithmetic, 1978-1980

- Member of the Program Committee, 19th *IEEE Computer* Society International Conference (Spring COMPCON '81), February 23-25, 1981, San Francisco, California

- Member of the Program Committee, 7th Asilomar Workshop on Microcomputers, April 23-25, 1980, Pacific Grove, California

- Member of the Program Committee, 6th Asilomar Workshop on Microcomputers, May 23-25, 1979, Pacific Grove, California

- Member of the Program Committee, International Symposium on Mini- and Microcomputers, January 15-18, 1979, Anaheim, California

- Member of the Steering Committee, Session Chair, and Publications Chair; 11th Workshop on Microprogramming, November 19-22, 1978, Pacific Grove, California

## **Books**

1.  *Computer Architecture: A Quantitative Approach, 4th Edition,* David A. Patterson and John L. Hennessy, 2008

2.  *Computer Organization and Design: The Hardware/Software Interface, Fourth Edition,* John L. Hennessy and David A. Patterson, 2007

3.  *Computer Architecture: A Quantitative Approach, Third Edition,* David A. Patterson and John L. Hennessy, 2003

4.  *Information Technology for Counterterrorism: Immediate Actions and Future Possibilities,* John L. Hennessy, David A. Patterson, and Herbert S. Lin, Editors. Committee on the Role of Information Technology in Responding to Terrorism, National Research Council. National Academies Press, 2003

5.  *Computer Architecture: A Quantitative Approach, Instructor's Manual*, Morgan Kaufmann Publishers, Inc., San Mateo, Ca., 1990, 210 pages. David A. Patterson and John L. Hennessy

6.  *Computing Unbound: Using Computers in the Arts and Sciences,* David A. Patterson, Denise S. Kiser, D. Neel Smith, 1989

7.  *Instructor's Manual for Computing Unbound,* David A. Patterson, Denise S. Kiser, 1989

8.  *Computing Unbound: Hands-On Exercises for the Macintosh,* W.W. Norton & Company, New York, 1989, 307 pages. David A. Patterson, D.S. Kiser and D.N. Smith

9.  *A Taste of Smalltalk,* Ted Kaehler and David A. Patterson, 1986

## **Chapters of Books**

1.  "RISC: Effective Architecture for VLSI Computers*,'' VLSI Design and Architecture*, vol. 14 of VLSI Electronics Microstructure Science, Academic Press, 1986, pp. 36-77. David Patterson, M.G.H. Katevenis, R.W. Sherburne, and C.H.

2.  "Berkeley Smalltalk: Who Knows Where the Time Goes?" pp. 189-206 in *Smalltalk 80: Bits of History, Words of Advice.* (Edited by Glenn Krasner) Reading, MA: Addison-Wesley, 1983. David Patterson, D.M. Ungar

## **Articles for the Public**

1.  "An Endless Frontier Postponed," *Science* 6 May 2005, Vol. 308. no. 5723, p. 757 (Lazowska, Edward D. and Patterson, David A.)

2.  "Surrendering U.S. Leadership in IT," (editorial), C/Net News.com, 5/11/2005, (David Patterson)

3.   "Self Repairing Computers," *Scientific American*, June 2003. (Fox, Armando and Patterson, David A. )

4.   "Vulnerable Intel (FTC files antitrust suit against chip maker)," (Column) *New York Times* v147 (June 9, 1998):A27(N), A21(L). (Patterson, David)

5.   "Microprocessors in 2020," *Scientific American*, v273, n3 (Sept, 1995):62 (4 pages). (Patterson, David A.)

6.   "Perspective on Education: If UC Slips, All of California Slips," *Los Angeles Times*, Op-Ed Page, Thursday, May 20, 1993, page B7. (Patterson, David)

7.   "Teraflops Design in Eight Easy Steps," *Scientific American*, v264, n1 (January, 1991) pp. 104-105. (Patterson, David A.)

8.   "Microprogramming*," Scientific American*, vol. 248, No. 3, March, 1983, pp. 36-43.

9.   "RISC: New Microcomputer Architecture Concept Implemented in Silicon by EECS*,"* Highlights in EECS, EECS/ERL Research Summary, 1982.  David Patterson and C.H. Séquin.

10.  "RISC y Course Sequence Creates RISCy Microcomputer*,"* Research Highlight, *Forefront*, Research in the College of Engineering, 1980-1981, pp. 14-18.  David Patterson and C.H. Séquin.

## <mark>Articles for the Information Technology Community</mark>

"Stop whining about outsourcing!," *ACM Queue*, vol.3, no.9, Nov. 2005, pp. 63-4. (Patterson, D A)

"Computing research: a looming crisis," *Computer Communication Review* 35(3): 65-68 (2005) (Lazowska, Edward D. and Patterson, David A.)

"Farewell address: the growing and graying of ACM," *CACM* 49(6): 15-18 , 2006 (Patterson, D A)

"Revisiting my campaign statement," *CACM* 49(5): 27-30 , 2006 (Patterson, D A)

"Seven reasons to shave your head and three reasons not to: the bald truth," *CACM* 49(4): 31-32 , 2006 (Patterson, D A)

"Computer science education in the 21st century," *CACM* 49(3): 27-30, 2006 (Patterson,D)

"Reviving your favorite CS books," *CACM* 49(3): 31 , 2006 (Patterson, D A)

"Offshoring: finally facts vs. folklore," *CACM* 49(2): 41-42 , 2006 (Patterson, D A)

"New Directions for CACM?" *CACM* 49(1): 33-35 , 2006 (Patterson, D A)

"Robots in the desert: a research parable for our times," *CACM* 48(12): 31-33 , 2005 (Patterson, D A)

"Rescuing our families, our neighbors, and ourselves," *CACM* 48(11): 29-31 , 2005 (Patterson, D A)

"The new Professional Development Centre boasts 1, 000 courses, O'Reilly Books, and CS classics," *CACM* 48(10): 15-16 , 2005 (Patterson, D A)

"Restoring the popularity of computer science," *CACM* 48(9): 25-28 , 2005 (Patterson, D)

"Does ACM support matter to conferences or journals?" *CACM* 48(8): 29-30 , 2005 (Patterson, D A)

"Reflections on a programming Olympiad," *CACM* 48(7): 15-16 , 2005 (Patterson, D A)

"Do you Queue?" *CACM* 48(6): 27-28 , 2005 (Patterson, D A)

"Recognizing individual excellence helps us all," *CACM* 48(5): 27-28 , 2005 (Patterson, D A)

"The state of funding for new initiatives in computer science and engineering," *CACM* 48(4): 21-25 , 2005 (Patterson, D A)

"20th century vs. 21st century C&C: the SPUR manifesto," *CACM* 48(3): 15-16 , 2005 (Patterson, D A)

"Why join ACM?" *CACM* 48(2): 14 , 2005 (Patterson, D A)

"Minority-minority and minority-majority technology transfer," *CACM* 48(1): 25-26 , 2005 (Patterson, D A)

"The health of research conferences and the dearth of big idea papers," *CACM* 47(12): 23-24 , 2004 (Patterson, D A)

"Hot links," *CACM* 47(10): 19-20 , 2004 (Patterson, D A)

"Fostering Community Within a CS&E Department: A Berkeley Perspective," *Computing Research News*, Sept 2002. (Patterson, D A)

"Commercialization Oversight for Computer Research Departments," *Computing Research News*, July 2001. (David Patterson and Larry Snyder)

"Evaluating Computer Scientists and Engineers For Promotion and Tenure," *Computing Research News*, Sept 1999. (David Patterson, Lawrence Snyder, and Jeffrey Ullman)

"Has CS Changed in 20 Years?" *Computing Research News*, 4(2):2-3, March 1992. (Patterson, DA)

"EXPERT OPINION:  Traditional mainframes and supercomputers are losing the battle," *IEEE Spectrum*, Vol. 29, No. 1, p. 34, January 1992. (Patterson, DA)

**Refereed Journal, Conference, and Workshop Papers**

Detecting Large-Scale System Problems by Mining Console Logs. International Conference on Machine Learning (ICML) June 2010 (Invited Application Paper), Haifa, Israel. (Wei Xu, Ling Huang, Armando Fox, David Patterson, Michael Jordan).

"In Characterizing, modeling, and generating workload spikes for stateful services" , In Symposium on Cloud Computing (SOCC), June 2010, Indianapolis, IN. (Peter Bodik, Armando Fox, Michael Franklin, Michael Jordan, David A. Patterson).

"Ubiquitous Parallel Computing from Berkeley", Illinois and Stanford. . IEEE Micro. 2010 (Bryan Catanzaro, Armando Fox, Kurt Keutzer, David A. Patterson, Bor-Yiing Su).

"RAMP Gold: An FPGA-based Architecture Simulator for Multiprocessors". In: Design Automation Conference (DAC-2010), June 2010, Anaheim, CA. (Zhangxi Tan, Andrew Waterman, Rimas Avizienis, Yunsup Lee, Krste Asanovic, David A. Patterson).

"A Case for FAME: FPGA Architecture Model Execution", To appear, International Symposium on Computer Architecture (ISCA-2010), June 2010, Saint-Malo, France. (Zhangxi Tan, Andrew Waterman, Henry Cook, Sarah Bird, Krste Asanović, David A. Patterson).

"Statistics-Driven Workload Modeling for the Cloud". Most Popular Paper Award. Workshop on Self-Managing Database Systems (SMDB), March 2010, Long Beach, CA. (Archana Ganapathi, Yanpei Chen, Armando Fox, Randy Katz, David A. Patterson).

"Statistics-Driven Workload Modeling for the Cloud". In: Workshop on Self-Managing Database Systems (SMDB). March 2010, Long Beach, CA. (Archana Ganapathi , Yanpei Chen, Armando Fox, Randy Katz, David A. Patterson).

"An FPGA-based Simulator for Datacenter Networks.", In: The Exascale Evaluation and Research Techniques Workshop (EXERT 2010), at the 15th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS March 2010). Pittsburgh, PA. (Zhangxi Tan, Krste Asanović, David A. Patterson).

"Online system problem detection by mining patterns of console logs detection". International Conference on Data Mining series, December 2009, Miami, FL. (Wei Xu, Ling Huang, David Patterson, Armando Fox, Michael Jordan).

Mining Console Logs for Large-Scale System Problem Detection. Symposium on Operating Systems Principles (SOSP), August 2009, Big Sky, MT (Wei Xu, Ling Huang, David Patterson, Armando Fox, Michael Jordan).

"Automatic Exploration of Datacenter Performance Regimes. Workshop on Automatic Control for Datacenters and Clouds". Conference on Autonomic Computing and Communications (ICAC 2009) June 2009, Barcelona, Spain. (Peter Bodik, Rean Griffith, Charles Sutton, Armando Fox, Michael I. Jordan, David A. Patterson).

"Your students are your legacy": Viewpoints table of contents, Vol. 52, Issue 3 (March 2009), Being Human in the Digital Age, pp. 30-33, Year of Publication: 2009, ISSN: 0001-0782

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