

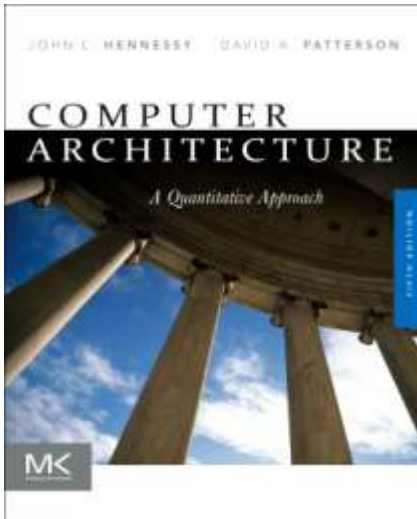


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## THE "BIBLE" OF COMPUTER ARCHITECTURE CELEBRATES 20th ANNIVERSARY

***Computer Architecture: A Quantitative Approach, 5<sup>th</sup> Edition* by John Hennessy and David A. Patterson  
Breaks New Ground with an Emphasis on Mobility and the Cloud**

**Waltham, MA – June 7th, 2011** –John L. Hennessy and David A. Patterson today launch a celebration of the 20th anniversary of the publication of their "bible" of computer architecture, [\*Computer Architecture: A Quantitative Approach\*](#) first published by Morgan Kaufmann in 1990. The authors will host an evening reception on the campus of Stanford University to thank the many contributors to their work since its inception.



"If Neil Armstrong offers to give you a tour of the lunar module, or Tiger Woods asks you to go play golf with him, you should do it," says Robert Colwell, lead designer for Intel. "When Hennessy and Patterson offer to lead you on a tour of where computer architecture is going, they call it *Computer Architecture: A Quantitative Approach*. You need one. Tours leave on the hour."

Hennessy, the president of Stanford University, where he has been on the faculty since 1977, and Patterson, the Pardee Chair of Computer Science at the University of California at Berkeley where he has also been on the faculty since 1977, will publish the 5<sup>th</sup> Edition of their landmark work in September of 2011.

The computing world today is in the middle of a revolution: mobile clients and cloud computing have emerged as the dominant paradigms driving programming and hardware innovation today. The Fifth Edition of *Computer Architecture* focuses on this dramatic shift, exploring the ways in which software and technology in the "cloud" are accessed by cell phones, tablets, laptops, and other mobile computing devices. Each chapter includes two real-world examples, one mobile and one datacenter, to illustrate this revolutionary change.

### About the Authors

**John L. Hennessy** is the president of Stanford University, where he has been a member of the faculty since 1977 in the departments of electrical engineering and computer science. Hennessy is a fellow of the IEEE and the ACM, a member of the National Academy of Engineering, the National Academy of Science, the American Academy of Arts and Sciences, and the Spanish Royal Academy of Engineering. He received the 2001 Eckert-Mauchly Award for his contributions to RISC technology, the 2001 Seymour Cray Computer Engineering Award, and shared the John von Neumann award in 2000 with David Patterson. After completing the MIPS project in 1984, he took a one-year leave from the university to co-found MIPS Computer Systems, which developed one of the first commercial RISC microprocessors. After being acquired by Silicon Graphics in 1991, MIPS Technologies became an independent company in 1998, focusing on microprocessors for the embedded marketplace. As of 2004, over 300 million MIPS microprocessors have been shipped in devices ranging from video games and palmtop computers to laser printers and network switches. Hennessy's more recent research at Stanford focuses on the area of designing and exploiting multiprocessors. He helped lead the design of the DASH multiprocessor architecture, the first distributed shared-memory multiprocessors supporting cache coherency, and the basis for several commercial multiprocessor designs, including the Silicon Graphics Origin

multiprocessors. Since becoming president of Stanford, revising and updating this text and the more advanced Computer Architecture: A Quantitative Approach has become a primary form of recreation and relaxation.

**David A. Patterson** is a member of both the National Academy of Engineering and the National Academy of Sciences, is a Fellow of the Computer Society of the Institute of Electrical and Electronic Engineers (IEEE), and is also a Fellow of the ACM. He has taught computer architecture at the University of California at Berkeley since joining the faculty in 1977, and is holder of the E.H. and M.E. Pardee Chair of Computer Science. At Berkeley, he led the design and implementation of RISC I, likely the first VLSI Reduced Instruction Set Computer. This research became the foundation of the SPARC architecture, currently used by Fujitsu, Sun Microsystems, and others. (In 1996 Microprocessor Report and COMDEX named SPARC as one of the most significant microprocessors as part of the celebration of the 25th anniversary of the microprocessor.) He was also a leader of the Redundant Arrays of Inexpensive Disks (RAID) project, which led to reliable storage systems from many companies. These projects led to three distinguished dissertation awards from the Association for Computing Machinery (ACM). He was also involved in the Network of Workstations (NOW) project, which led to multitier architectures used by Internet companies such as Inktomi. His current research interests are in the parallel computing revolution using via the Parallel Computing Laboratory (Par Lab) and using the Research Accelerator for Multiple Processors (RAMP) and in Reliable Adaptive Distributed systems in the RAD Lab.

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### Upcoming Release

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#### ***Computer Architecture: A Quantitative Approach*, 5<sup>th</sup> Edition**

By John L. Hennessy and David A. Patterson

ISBN: 9780123838728

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