Stanford



John Hennessy

President Emeritus, Shriram Family Director of the Knight-Hennessy Scholars Program, James F. and Mary Lynn Gibbons Professor and Professor of Electrical Engineering and of Computer Science

Bio

BIO

John L. Hennessy joined Stanford's faculty in 1977 as an assistant professor of electrical engineering. He rose through the academic ranks to full professorship in 1986 and was the inaugural Willard R. and Inez Kerr Bell Professor of Electrical Engineering and Computer Science from 1987 to 2004.

From 1983 to 1993, Dr. Hennessy was director of the Computer Systems Laboratory, a research and teaching center operated by the Departments of Electrical Engineering and Computer Science that fosters research in computer systems design. He served as chair of computer science from 1994 to 1996 and, in 1996, was named dean of the School of Engineering. As dean, he launched a five-year plan that laid the groundwork for new activities in bioengineering and biomedical engineering. In 1999, he was named provost, the university's chief academic and financial officer. As provost, he continued his efforts to foster interdisciplinary activities in the biosciences and bioengineering and oversaw improvements in faculty and staff compensation. In October 2000, he was inaugurated as Stanford University's 10th president, a position he held until 2016. In 2016, he cofounded the Knight-Hennessy Scholars Program, which provides scholarships and leadership development for a global community of scholars enrolled in graduate programs at Stanford. The program admitted it's ninth class in 2026 and will provide full scholarships for up to 100 students every year.

A pioneer in computer architecture, in 1981 Dr. Hennessy drew together researchers to focus on a computer architecture known as RISC (Reduced Instruction Set Computer), a technology that has revolutionized the computer industry by increasing performance while reducing costs. In addition to his role in the basic research, Dr. Hennessy helped transfer this technology to industry. In 1984, he cofounded MIPS Computer Systems, later MIPS Technologies, which designed microprocessors. He also cofounded Atheros Communications, one of the first WIFI chip ompanies.

Dr. Hennessy is a recipient of the 2000 IEEE John von Neumann Medal, the 2000 ASEE Benjamin Garver Lamme Award, the 2001 ACM Eckert-Mauchly Award, the 2001 Seymour Cray Computer Engineering Award, a 2004 NEC C&C Prize for lifetime achievement in computer science and engineering, the 2012 IEEE Medal of Honor, IEEE's highest award, and the Association of Computing Machinery Turing Award He is a member of the National Academy of Engineering and the National Academy of Sciences, the American Philosophical Society and the American Academy of Arts and Sciences.

He has lectured and published widely and is the co-author of two internationally used undergraduate and graduate textbooks on computer architecture design. Dr. Hennessy earned his bachelor's degree in electrical engineering from Villanova University and his master's and doctoral degrees in computer science from the State University of New York at Stony Brook.

ACADEMIC APPOINTMENTS

- Professor, Electrical Engineering
- Professor, Computer Science

ADMINISTRATIVE APPOINTMENTS

- Director, Knight-Hennessy Scholars Program, Stanford University, (2016- present)
- President, Stanford Unversity, (2000-2016)
- Provost, Stanford University, (1999-2000)
- Dean, School of Engineering, Stanford University, (1996-1999)
- Chairman, Department of Computer Science, Stanford University, (1994-1996)
- Professor of Electrical Engineering and Computer Science, Stanford University, (1986- present)

HONORS AND AWARDS

- Turing Award, Association of Computing Machinery (2017)
- Doctor Honris Causa, Mathematics, University of Waterloo (2012)
- Medal of Honor (Highest award given by the Institute of Electrical and Electronics Engineers), IEEE (2012)
- Foreign Policy Association Medal and Honorary Fellow, Foreign Policy Association (2010)
- Morris Chang Exemplary Leadership Award, Global Semiconductor Alliance (2010)
- Spirit of Silicon Valley—Lifetime Achievement Award, Silicon Valley Leadership Group (2009)
- Ulysses Medal, University College Dublin (2009)
- Member, American Philosophical Society (2008)
- Educational Activities Board Vice President Recognition Award, IEEE (2007)
- Fellow, Computer History Museum (2007)
- 100th Anniversary Medallion, College of Engineering, Villanova University (2005)
- Founders Award, American Academy of Arts and Sciences (2005)
- Honorary Doctorate, University of Edinburgh (2005)
- Honorary Doctor Degree, Peking University (2004)
- Honorary Doctor of Engineering, University of Notre Dame (2004)
- Koret Prize, Koret Foundation (2004)
- Prize for lifetime achievement in computer science and engineering, NEC Computers and Communications (2004)
- Docteur Honris Causa, Ecole Polytechnique Federale de Lausanne (2003)
- Doctor Honris Causa, Universitat Politècnica de Catalunya (2002)
- Member, National Academy of Sciences (2002)
- Eckert-Mauchly Award, Association for Computing Machinery and IEEE Computer Society (2001)
- Honorary Doctor of Humane Letters, Villanova University (2001)
- Honorary Doctor of Science, State University of New York at Stony Brook (2001)
- Seymour Cray Computer Engineering Award, IEEE Computer Society (2001)
- Benjamin Garver Lamme Award, American Society for Engineering Education (2000)
- John Von Neumann Medal (jointly with D. Patterson), IEEE (2000)
- Fellow, Association for Computing Machinery (1997)

- J. Stanley Morehouse Memorial Award, Villanova University (1997)
- Fellow, American Academy of Arts and Sciences (1995)
- Emannuel R. Piore Award, IEEE (1994)
- Member, National Academy of Engineering (1992)
- Distinguished Alumnus Award, State University of New York at Stony Brook (1991)
- Fellow, Institute of Electrical and Electronics Engineers (1991)
- Willard and Inez Kerr Bell Endowed Professor of Electrical Engineering and Computer Science, Stanford University (1987)
- Outstanding Service Award, Electrical Engineering Department, Stanford University (1986)
- Presidential Young Investigator, National Science Foundation (1984)
- John J. Gallen Memorial Award, Villanova University (1983)
- Member, Tau Beta Pi (1973)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Board of Directors, Cisco Systems (2002 - 2017)
- Board of Trustees, Gordon & Betty Moore Foundation (2012 - present)
- Board of Directors, Google (2004 - present)
- Technology Advisory Board, Microsoft Corporation (1992 - 1996)
- Chairman, Board of Directors, Atheros (1998 - 2010)
- Member, Committee on Research Universities, National Research Council (2010 - present)
- Co-chair, Committee on Scientific Communication and National Security, National Research Council (2007 - present)
- Member and Chair, NAE, Peer Selection Committee for Computer Science and Engineering (Chair 2000) (1996 - 2000)
- Member, Committee to Study the Investment Strategy for DARPA, Defense Science Board (1998 - 1999)
- Member, Commission on Physical Sciences, Mathematics, and Applications, National Research Council (1998 - 1999)
- Chairman, Information Science and Technology (ISAT) Study, Defense Advanced Research Projects Agency (1994 - 1996)
- Member, Advisory Committee for Computer and Information Science and Engineering, NSF (1992 - 1996)
- Member, Fellowship Selection Committee, Sloan Foundation (1993 - 1996)
- Member, Task Force on Future of Supercomputer Centers Program, National Science Foundation (1995 - 1995)
- Member, Status and Direction of the High Performance Computing and Communications Initiative (Brooks-Sutherland Committee), National Research Council (1995 - 1995)
- Member, Computer Science and Technology Board, National Research Council (1989 - 1994)
- Member, Committee to Study Academic Careers for Experimental Computer Scientists, National Research Council (1992 - 1993)
- Chair, Oversight Review of the Computer and Information Science and Engineering Institutional Infrastructure Program, National Science Foundation (1992 - 1992)
- Member, Committee to Study International Developments in Computer Science and Technology, NRC (1988)
- Academic Advisory Councils and Visiting Committees, College of Engineering, UC Berkeley; College of Engineering, Cornell University; Computer Science Department, Princeton University; School of Engineering and Applied Sciences, Princeton University; NCIR, Dublin, Ireland
- General Chair, Hot Chips Symposium (1999)
- Program Committee Co-Chair, Hot Chips Symposium (1993)
- Program Committee Member, Hot Chips Symposium (1991)
- Program Chair, 20th International Conference on Computer Architecture (1993)
- Program Chair, ASPLOS-III Conference (1988)

- Member, Program Committee, 4th Annual ACM Symposium on Parallel Algorithms and Architectures (1992)
- Co-Chair, Research in Experimental Computer Science (sponsored by Office of Naval Research) (1991)
- Member, Program Committee, SOSP Conference (1991)
- Member, Program Committee, ACM Sigmetrics Conference (1991)
- Member, Program Committee, ISSMM (1991)
- Member, Program Committee, Intl. Conference on Shared-Memory Multiprocessors (1990)
- Member, Program Committee, Intl. Symposium on Computer Architecture (1999)
- Member, Program Committee, Intl. Symposium on Computer Architecture (1995)
- Member, Program Committee, Intl. Symposium on Computer Architecture (1990)
- Member, Program Committee, Intl. Symposium on Computer Architecture (1987)
- Member, Program Committee, Intl. Symposium on Computer Architecture (1986)
- Member, Program Committee, ASPLOS-II Conference (1987)
- Area Editor (Parallel Architecture), Journal of Parallel and Distributed Computing
- Area Editor (Computer Architecture), Journal of the Association for Computing Machinery (1990 - 1995)
- Associate Editor, IEEE Transactions on Microelectronic Systems (1992 - 1993)
- Editor, Journal of the Association for Computing Machinery (1990 - 1993)
- Editor, Journal of VLSI and Computer Systems (1982 - 1984)
- Editor, IEEE Design and Test (1984 - 1986)
- Associate Editor, IEEE MICRO (1981 - 1982)

PROFESSIONAL EDUCATION

- Ph.D., S.U.N.Y. Stony Brook , Computer Science (1977)
- M.S., S.U.N.Y. Stony Brook , Computer Science (1975)
- B.E., Villanova University , Electrical Engineering (1973)

LINKS

- https://web.stanford.edu/dept/president: https://web.stanford.edu/dept/president

Teaching

STANFORD ADVISEES

Master's Program Advisor

Emma Casey, Dylan Khangsar, Qasim Li, Xinyu Li, Luke Shuman, Joshua Tikare