BUTLER LAMPSON

[Login to edit profile]
Position: Adjunct Professor
Office: 32-G924
Phone: +1 (617) 253-6004
Email: blampson@microsoft.com
Areas of Study: Architecture Personal Website
Last Update: July 9, 2008
Download vCard

BIOGRAPHY

Butler Lampson is a Distinguished Engineer at Microsoft Corporation and an Adjunct Professor of Computer Science and Electrical Engineering at MIT. He was on the faculty at Berkeley and then at the Computer Science Laboratory at Xerox PARC and at Digital's Systems Research Center. He has worked on computer architecture, local area networks, raster printers, page description languages, operating systems, remote procedure call, programming languages and their semantics, programming in the large, fault-tolerant computing, transaction processing, computer security, WHSIWYG editors, and tablet computers. He was one of the designers of the SDS 940 time-sharing system, the Alto personal distributed computing system, the Xerox 9700 laser printer, two-phase commit protocols, the Autonet LAN, the SPKI system for network security, the Microsoft Palladium security system, the Microsoft Tablet PC software, and several programming languages.

He received an AB from Harvard University, a PhD in EECS from the University of California at Berkeley, and honorary ScD's from the Eidgenössische Technische Hochschule, Zurich and the University of Bologna. He holds a number of patents on networks, security, raster printing, and transaction processing. He is a member of the National Academy of Engineering and a Fellow of the Association for Computing Machinery and the American Academy of Arts and Sciences. He received the ACM Software Systems Award in 1984 for his work on the Alto, the IEEE Computer Pioneer award in 1996, the National Computer Systems Security Award in 1998, the IEEE von Neumann Medal in 2001, the Turing Award in 1992, and the National Academy of Engineering's Draper Prize in 2004.

PUBLICATIONS

Computer security in the real world, IEEE Computer 39, 6 (June 2004)

A trusted open platform, IEEE Computer 36, 7, July 2003 (with England et al)

SDSI - A Simple Distributed Security Infrastructure. http://theory.lcs.mit.edu/~cis/sdsi.html, 1996 (with R. Rivest).

Analysis and caching of dependencies. ACM SigPlan International Conference on Functional Programming, Philadelphia, May 1996 (with Abadi and Levy)

Authentication in the Taos operating system. ACM Trans. Computer Systems 12, 1, Feb. 1994 (with Abadi et al)

Authentication in distributed systems: Theory and practice. ACM Trans. Computer Systems 10, 4, Nov. 1992 (with Abadi et al)

Reliable messages and connection establishment. In Distributed Systems, ed. S. Mullender, 2nd ed., Addison-Wesley, 1993

A kernel language for modules and abstract data types. Information and Computation 76, 2/3, Feb./Mar. 1988 (with R. Burstall).

Personal distributed computing: The Alto and Ethernet software. In A History of Personal Workstations, ed. A. Goldberg, Addison-Wesley, 1988

Hints on computer system design. IEEE Software 1, 1, Jan. 1984

Practical use of a polymorphic applicative language. Proc. 10th ACM Symposium on Principles of Programming Languages, 1983 (with E. Schmidt)

Alto: A personal computer. In Computer Structures: Principles and Examples, ed. Siewiorek, Bell and Newell, McGraw Hill, 1981 (with Thacker et al)

Experience with processes and monitors in Mesa. Comm. ACM 23, 2, Feb. 1980 (with D. Redell)

An open operating system for a single user machine. ACM Operating Systems Rev. 11, 5, Dec. 1979 (with R. Sproull)

Reflections on an operating system design. Comm. ACM 19, 5, May 1976 (with H. Sturgis).

Lampson, Protection. ACM Operating Systems Rev. 8, 1 (Jan. 1974)

A note on the confinement problem. Comm.

ACM 16, 10, Oct. 1973

A user machine in a time sharing system. Proc. IEEE 54, 12, Dec. 1966. Reprinted in Computer Structures, ed. Bell and Newell, McGraw Hill, 1971, pp 291 300 (with Pirtle and Lichtenberger)

AWARDS

IFIP TC11: Kristian Beckman Award (2006)

National Academy of Sciences: Member (2005)

Association for Computing Machinery: SIGOPS Hall of Fame Award (2005)

National Academy of Engineering: Charles Stark Draper Prize (2004)

Institute of Electrical and Electronics Engineers: John von Neumann Medal (2001)

Association for Computing Machinery: Fellow (1994)

Association for Computing Machinery: A.M. Turing Award (1992)

National Academy of Engineering: Member (1984)

submit new awards here

(CSAIL members only)