

# ERIC A. BREWER

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## Education

- Ph.D. — Massachusetts Institute of Technology** August 1994  
Topic: Parallel Computing. Thesis: *Portable High-Performance Supercomputing: High-Level Platform-Dependent Optimization*. Minor: statistics and modeling.
- Master of Science — Massachusetts Institute of Technology** February 1992  
Thesis title: *Aspects of a Parallel-Architecture Simulator*.
- Bachelor of Science — University of California at Berkeley** May 1989  
High Honors, Electrical Engineering and Computer Science.

## Experience

- Professor, U. C. Berkeley** July 1994 – Present  
Leading researcher on Internet systems, technology for developing regions, sensor networks and security. Courses include software engineering and graduate operating systems.
- Director, Intel Research Berkeley** June 2005 – Present  
Lead a team of Intel Researchers and students on a broad array of new technologies.
- Co-Founder and Chief Scientist, Inktomi Corporation** July 1995 – March 2003  
Co-founded Inktomi to apply parallel-computing technology to a search engine for the web. Part-time position; member of the Board of Directors; acting CEO until July 1996. Responsibilities include long-term technology and strategy. Inktomi went public in June 1998, became profitable in 2000, and made the *Nasdaq 100*. It was acquired by Yahoo! in 2003.
- Founder and Chairman, Federal Search Foundation** June 2000 – June 2002  
Worked with President Clinton to create the first web portal and search engine, [www.FirstGov.gov](http://www.FirstGov.gov), for the federal government. The foundation was a 503(c) non-profit group dedicated to helping the government use the Internet well. The site won numerous awards.
- Software Engineer, CADAM, Inc.** June 1986 – November 1992  
Developed advanced algorithms for computer-aided drafting; design and implementation of a leading-edge CAD system. Primary accomplishments included tools for global program transformations and innovative graphical user-interface design (see patent described below).
- Consultant, Idea Group** August 1990 – 2000  
Designed a set of six foam puzzles called *Snafooz* that are now available in toy stores nationwide. Designed custom software to find the best designs, and puzzle solutions.

## Awards and Honors

- *Industry Standard*: [Most Influential Internet Architect](#) (2000) “The person most instrumental in establishing the Net’s conceptual framework” [for leadership of Internet caching]
- World Economic Forum: Global Leader for Tomorrow (2000-2002)
- *Upside Magazine*: Top 100 leaders of the Internet Age (1998 and 2000)
- *Technology Review*: TR100 [top 100 leaders for the 21<sup>st</sup> Century, all fields]
- *Forbes*: One of Twelve members of the “E-Gang” – key leaders of the Internet economy (1999, including cover photo for October 1999 issue)
- *InfoWorld*: Top Ten Innovators, 2001 [for leadership of Internet Search Engines]
- *Computer Networks*: Best Paper Award for all of 2001 [Ninja journal paper]
- [CIO Council Azimuth Award](#) (2001): This is the highest technical award in the Federal government. It is awarded to one non-government person each year by the CIO Council (the CIOs of the major agencies). This was for the creation of the FirstGov portal.
- *Federal Computing Week*: Federal 100. The top 100 government technology people, 2001.
- *Vanity Fair*: The e-Establishment 50. Top 50 people in combination of media and technology, 2000
- *Honorable Mention, ACM Dissertation Award* for my advisee David Wagner.
- Many other small awards for being one of the leaders of the Internet revolution
- Alfred P. Sloan Research Fellow, 1997-2000
- Office of Naval Research Graduate Fellow (1989-1993)
- Winner of National Science Foundation Graduate Fellowship
- Winner of National Defense Research Graduate Fellowship
- 1987 Cray Scholarship for Outstanding Work in VLSI
- 1988 Lockheed Management Association Scholarship
- Member of Tau Beta Pi and Eta Kappa Nu honor societies
- National Merit Scholar
- University of California Regent’s Scholar (1985)
- John F. Kennedy High School Valedictorian
- Winner of the 1979 Rockwell Computer Science Competition
- Member of the ACM, Usenix, and IEEE.

## Patents

**Dynamic Highlighting** (filed by CADAM/IBM). Patent covers algorithms that automatically highlight the closest object to the mouse-driven cursor, which allows users to see which object will be affected before they click one of the buttons. This greatly reduces drafting time by reducing errors and allowing quick object selection. This patent is coauthored with Mark Pinson.

**Hierarchical Random Wiring for Multiprocessor Networks** (US Patent number 5519694). Proposed patent covers the use of hierarchical random wiring in the construction of multibutterfly interconnection networks (see research section below). Also covers *dynamic random multiplexing*, in which the wiring is deterministic, but the switches randomly multiplex packets on the wires, thus achieving the same effect as random wiring. This patent is coauthored with Frederic T. Chong.

(Publications, references and other details available upon request)