

# Computer Society Seeks Nominations for Technology of the Decade Award

The IEEE Computer Society has begun accepting nominations for its Technology of the Decade Award, which will recognize a significant contribution to innovative information technology over the past decade.

While the technology behind this contribution might have been developed as many as 25 years ago, it is its impact over the past 10 years (1996-2005) that is of principal importance.

Nominations can suggest any individual or group of individuals who has made a major contribution to the computer science and engineering field. There are no other restrictions. A board of judges, consisting of nearly two dozen leaders from industry and academia, will form a

review panel to screen the candidates. Judges will select a winner by early August. Nominations are due by **15 June**.

IEEE Computer Society President Deborah Cooper will present the Technology of the Decade Award at the Computer Society Anniversary gala on 30 October, held in conjunction with the Frontiers in Education 2006 conference in San Diego.

A special brochure will be distributed at the presentation venue. Honorees receive a crystal model and an illuminated certificate, plus travel to the presentation site. For more information about submitting nominations for the Technology of the Decade Award, visit [www.computer.org/awards](http://www.computer.org/awards). ■

## IEEE Computer Society Technology of the Decade Award Board of Judges

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## Steven L. Scott Receives 2005 Cray Award

The IEEE Computer Society recently honored Steven L. Scott, chief architect of the Cray X1 supercomputer, with its 2005 Seymour Cray Computer Science and Engineering Award. Scott's citation reads, "For advancing supercomputer architecture through the development of the Cray T3E, the Cray X1, and the Cray 'Black Widow.'"

Built on the foundation of its T3E predecessor, while providing a platform for the upcoming "Black Widow" release, the current Cray X1 is a massively parallel supercomputer that uses both single-stream and multistream processors. It is also the first US-based computer to offer both vector processing and massively parallel processing capabilities in the same architecture. In keeping with the Cray tradition of creativity, the X1 employs several nontraditional vector concepts, including multistreaming processors and vector caches.



*Steven L. Scott, chief architect of the Cray X1 supercomputer.*

Scott has also been a key player in designing the Cray/Sandia Red Storm, a single-system, distributed memory parallel supercomputer that recently posted 1.8 TB/sec on the PTRANS interconnect bandwidth test, the first computer to pass the 1 TB/sec mark.

Named a Hertz Foundation Fellow at the University of Wisconsin, Scott's research interests include cache coherence, synchronization mechanisms, interconnection networks, and scalable parallel architectures. Scott has served as an

associate editor for *IEEE Transactions on Parallel and Distributed Systems*. In 2005, he received the ACM's Maurice Wilkes Award for outstanding contributions to computer architecture by a researcher whose professional career began within the past 20 years.

For further information on the Cray award, including a list of past recipients, visit [www.computer.org/awards](http://www.computer.org/awards). ■

## John B. Bell Wins 2005 Fernbach Award

John B. Bell, head of the Center for Computational Sciences and Engineering at Lawrence Berkeley National Laboratory, was recently honored by the IEEE Computer Society with its 2005 Sidney Fernbach Award. Bell's award citation reads, "For outstanding contributions to the development of numerical algorithms, mathematical, and computational tools and the application of those methods to conduct leading-edge scientific investigations in combustion, fluid dynamics, and condensed matter."

Bell's most recent work, a suite of laboratory-scale direct numerical-style combustion simulations, was featured in the *Proceedings of the National Academy of Sciences*. Bell was a corecip-



*John B. Bell, head of the Center for Computational Sciences and Engineering at Lawrence Berkeley National Laboratory.*

ient of the 2003 Society for Industrial and Applied Mathematics/ACM Prize in Computational Science and Engineering.

The IEEE Computer Society Sidney Fernbach Award recognizes individuals who have made notable strides in developing applications for high-performance computing. The Fernbach winner receives a certificate of recognition and a \$2,000 honorarium during a special ceremony at SC. This year, Bell will also give a special lecture presentation.

To nominate a potential recipient, or to learn more about any IEEE Computer Society award, visit [www.computer.org/awards](http://www.computer.org/awards). Nominations for next year's Fernbach Award are due by **31 July**. ■

# Society Awards Honor Top Computer Professionals

**T**he IEEE Computer Society sponsors an active and prestigious awards program to recognize accomplished computer professionals for their outstanding technical achievements as well as exemplary service to the Society and to the computer science and engineering profession.

## TAYLOR L. BOOTH AWARD

The IEEE Computer Society Taylor L. Booth Award rewards an outstanding record in computer science and engineering education. To receive the award, an individual must meet two or more of the following criteria: achieving recognition as a teacher of renown; writing an influential text; leading the creation of a curriculum in the field; or inspiring others to a career in computer science and engineering education.

2004 Booth Award winner Tadao Nakamura was selected “for leadership in the reform of advanced information science education and for important and substantive contributions to information science and computer engineering education in Japan.” An IEEE Fellow, Nakamura is a professor of computer science at Tohoku University, where his research centers on computer architecture, especially pipelining-based microarchitecture, and low-power concepts in chips. He received a bronze medal and a \$5,000 honorarium.

## HANS KARLSSON AWARD

The IEEE Computer Society Hans Karlsson Award honors and encourages leadership and achievement through collaboration among present or past participants in Computer Society standards activities.

Yervant Zorian, of Virage Logic, garnered the 2005 Karlsson award “... for outstanding leadership, communications, and achievement with the IEEE Testability Method for Embedded Core-Based ICs standard (IEEE Std. 1500tm-2005) through collaboration with major industry groups.” Zorian chairs the IEEE Computer Society Test Technology Council Technical Activity Committee on Embedded Core Test.

David B. Gustavson, of SCIzzL, earned the 2004 Karlsson award “for outstanding leadership in Standards and for ... insight, organization, and political astuteness in bringing the Scalable Coherent Interface (IEEE 1596-1992) to fruition, significantly advancing the art and science of scalable systems.” Gustavson served as chairperson of the IEEE P1596 working group that developed the scalable coherent interface.

## HARRY H. GOODE MEMORIAL AWARD

The IEEE Computer Society Harry H. Goode Memorial Award recognizes achievements in the information processing field for either a single contribution of theory, design, or technique of outstanding significance or for the accumulation of important contributions on theory or practice over an extended period.

2006 Goode honoree Alan J. Smith was chosen “for leadership in the measurement and evaluation of cache and memory system performance.” Smith is a professor at the University of California, Berkeley, where his interests include database management systems, and computer architecture and engineering.

2005 Goode Award winner John E. Hopcroft was honored “for fundamental contributions to the study of algorithms and their applications in information processing.” Hopcroft is IBM Professor of Engineering and Applied Mathematics in Computer Science at Cornell University, where his research focuses on theoretical aspects of computing, especially automata theory, graph algorithms, and analysis of algorithms. ■

## Computer Society and IEEE Sponsor Lucrative Prizes at Intel Science Fair

Each year, both the IEEE Computer Society and the IEEE Foundation sponsor special awards for outstanding high school students at the Intel International Science and Engineering Fair, which takes place this year 7-13 May in Indianapolis, Indiana.

The Computer Society typically sponsors six to eight individual and team awards at ISEF that range from \$300 to \$700. The ISEF award winners receive a framed certificate and a one-year free subscription to an IEEE Computer Society magazine of their choice.

The IEEE Foundation Presidents' Scholarship recognizes an outstanding achievement in research and presentation of engineering knowledge in electrical engineering, information technology, or other IEEE fields of interest. The winner will receive \$2,500 during each of four years of undergraduate study, as well as an IEEE student membership.

For further information about the IEEE Presidents' Scholarship, visit [www.ieee.org/education/precollege/scholarship/index.html](http://www.ieee.org/education/precollege/scholarship/index.html).