S
ince 1946, the IEEE Computer Society has been dedicated to advancing the theory, practice, and application of computer and information processing technology. To promote the active exchange of information, ideas, and technological innovation, the Computer Society sponsors a full spectrum of conferences, publications, local and student chapters, a distance learning campus, and numerous technical committees and standards working groups.

The Computer Society began in 1946 as the Subcommittee on Large-Scale Computing of the American Institute of Electrical Engineers. Five years later, the Institute of Radio Engineers formed its Professional Group on Electronic Computers. When the AIEE and the IRE merged in 1963 to become the Institute of Electrical and Electronics Engineers, the AIEE committee and IRE group combined to form the modern IEEE Computer Society.

As a highly regarded provider of technical information for computing professionals, the Society serves as a leading source of valuable career resources that are presented in convenient media formats. Approximately 150 Computer Society conferences cover research areas of both broad and specific interest to computing professionals, while 14 technical magazines and 14 transactions address all aspects of computer engineering.

An overview of notable highlights in 2006 follows.

PUBLICATIONS

Individual magazine and journal editorial boards work to provide members with the targeted, high-quality content that has been the hallmark of Computer Society publications for more than 50 years. Venerable stalwarts IEEE Software, IEEE Internet Computing, and IEEE Transactions on Software Engineering continue to enjoy a significant following of loyal subscribers. The success of newer titles such as IEEE Security and Privacy, IEEE Transactions on Dependable and Secure Computing, and IEEE/ACM Transactions on Computational Biology and Bioinformatics is a definitive sign that volunteer leaders are effectively targeting the needs of today’s generation of computing professionals.

Members can get more involved with the Society’s publications program by becoming authors, reviewers, or editorial board members. Visit the Computer Society’s site at www.computer.org/publications to learn more about the periodicals of your choice. Also, a number of magazines are seeking new editors in chief for 2007. To find out more about these positions, see the “Society Publications Seek Editors in Chief for 2007-2008 Terms” sidebar.

Computer Society Digital Library

The IEEE Computer Society Digital Library provides online access to 22 society magazines and transactions, more than 1,700 selected conference proceedings, and a number of tutorials and scholarly books. All members receive free online access to Computer magazine as a benefit of membership. An all-in-one CSDL account, available in 2006 for $118, allows members access to content from all Computer Society publications. Traditional single-magazine subscriptions are also available in print, online, or joint formats. Individual documents are available to members for $9 and to non-members for $19.

CSDL search results now provide links to materials from the ACM; article abstract pages include links to resources listed in the bibliographies; and CSDL subscribers can save searches and search terms, making it easier to find new material on a given topic as it appears. Access to the full text of individual IEEE Computer Society periodicals is available to members who subscribe and have a valid IEEE Web Account. Some IEEE Computer Society periodicals are published in technical cosponsorship with other IEEE societies.

New publication

The IEEE Computer Society Board of Governors recently named Jean-Luc Gaudiot, professor of electrical engineering and computer science at the University of California, Irvine, as the first editor in chief of IEEE Computer Architecture Letters, beginning in January 2006.

IEEE Computer Architecture Letters is a quarterly forum for rapid publication of new, high-quality ideas in
the form of short, critically refereed technical papers. Accepted letters are published immediately online and in the next available paper issue.

**CAL** is distributed in print to all members of the IEEE Computer Society Technical Committee on Computer Architecture. Regular notifications of new papers are sent to the TCCA as well as to members of the ACM Special Interest Group on Computer Architecture.

**CAL**'s editorial board has solicited papers on topics that include microprocessor and multiprocessor systems, microarchitecture and ILP processors, workload characterization, performance evaluation and simulation techniques, compiler-hardware and operating system-hardware interactions, and interconnect architectures.

All papers, accepted on a continuing basis, consist of original work that has not been previously published or reviewed elsewhere. Contributions beyond any prior work must be clearly articulated.

**IEEE Computer Society Online Bookshelf**

Computer Society members now enjoy access to an online collection of unabridged books on a variety of technology topics. Access to the basic 300-book collection, the IEEE Computer Society Online Bookshelf, powered by Books24x7, is a free benefit of membership. Access to additional titles is available at reduced rates. For $89 annually, members can access a 500-book collection. For $350, members can access Books24x7's full 2,500-book collection.

Computer Society Online Bookshelf titles are available for viewing through a customizable Referenceware online interface. Topics include IBM technologies, Web services, Microsoft SQL, CompTIA, CAD, and hundreds of others.

Books24x7 provides Web-based digital technical and business reference content to more than a million subscribers. The Referenceware platform enables users to search, browse, read, and interact with the content of several targeted professional reference libraries.

Complete title lists and registration information for the IEEE Computer Society’s Books 24x7 collections are available at www.computer.org/bookshelf/.

**DISTANCE LEARNING CAMPUS**

As a benefit of membership, Computer Society members have free access to more than 800 Web-based courses through the Society’s online Distance Learning Campus.

The courses are selected from a rotating catalog and cover a variety of computing topics that include business strategy, Cisco networks, databases, IP communications, security, XML, and more. Twice each year, volunteers review and select new Distance Learning offerings, based on survey data and usage numbers.

Offered in partnership with Thomson NETg, courses in the Distance Learning catalog offer presentations with voice-overs, 3D graphics, flash animations, onscreen text, and visual sentences that turn complex concepts into easy-to-understand images. Users can take pre-assessment tests, track ongoing progress, and study at a self-directed pace.

To learn more about IEEE Computer Society distance learning opportunities, visit the online campus at www.computer.org/distancelearning/.

**CONFERENCES**

IEEE Computer Society technical councils, task forces, and technical committees act as hosts to the majority of the Society’s technical meetings. The following selection of noteworthy conferences provides a glimpse into the depth and breadth of events presented each year by the Society.

23-27 January: SAINT 2006

The 2006 Symposium on Applications and the Internet will draw researchers from around the world to share new ideas and findings regarding the Internet and its applications. SAINT participants come from a wide spectrum of disciplines in government, industry, and academia.

Conference organizers have solicited papers on topics that include grid com-
puting, collaboration technology, Internet appliances, e-business, and Internet security. SAINT 2006—taking place in Phoenix this year—will also feature four workshops covering IPv6 deployment, service platforms for mobile systems, RFID and extended network deployment, and ubiquitous networking and context-aware services.

Cosponsored by the Information Processing Society of Japan, SAINT is the flagship conference of the IEEE Computer Society Technical Committee on the Internet. Fees are $575 for members, $720 for nonmembers, and $310 for students. Visit http://infonet.cse.kyutech.ac.jp/conf/saint06/ for more conference information.


The 2005 IEEE Virtual Reality Conference brings together practitioners in virtual reality systems, software, and applications to share recent research findings in augmented reality, mixed reality, 3D interaction, and other VR-related fields. Organizers have sought tutorial proposals on topics that include digital mock-ups, multimodal simulations, and haptics devices, among others. Also to appear at VR 2006 is keynote speaker Chris Dede of the Harvard Graduate School of Education.

VR 2006, located this year in Alexandria, Virginia, will take place in conjunction with the 2006 Haptics Symposium and the First IEEE Symposium on 3D User Interfaces. VR 2006 leads the Computer Society Technical Committee on Visualization and Graphics’ annual calendar of conferences and workshops.

Conference organizers are extending a discount on registration fees to all IEEE Computer Society members. For further details, including more registration information as it becomes available, visit www.vr2006.org.

27-30 March: ECBS 2006

In its 13th year, the annual IEEE International Conference and Workshop on the Engineering of Computer-Based Systems attracts participants who are interested in formulating and advancing methods, techniques, and tools for the design, development, deployment, and analysis of complex systems whose behavior is largely determined or controlled by computers.

Expert presenters at ECBS will address issues including system modeling, simulation, architectures, communications, security, reliability, human-computer interfacing, system integration, and project management. Scheduled workshop topics include the engineering of autonomic systems, refactoring of software at the architectural level, and system testing and validation.

ECBS is sponsored by the IEEE Computer Society Technical Committee on the Engineering of Computer-Based Systems. The 2006 conference will take place in Potsdam, Germany. Visit http://ecbs06.hpi.uni-potsdam.de/index.php for more information, including deadlines.

03-07 April: ICDE 2006

ICDE’06 The 22nd International Conference on Data Engineering addresses the use of engineering techniques and methodologies in the design, development, and assessment of information systems for different computing platforms and application environments.

Conference organizers have called for research prototype demonstrations of new data engineering technology, novel data engineering applications, and advances in database systems.

ICDE 2006, located this year in Atlanta, is sponsored by the IEEE Computer Society Technical Committee on Data Engineering in conjunction with the Database Society of Japan, the Information Processing Society of Japan, and the Institute of Electronics, Information, and Communication Engineering.


19-21 April: Cool Chips IX

Since it began in 1998, Cool Chips has become a leading international symposium for presenting advancements in low-power and high-speed chips. The symposium covers emerging technologies in all areas of microprocessors and their applications.

This year, the Cool Chips symposium will focus on low-power, high-performance processors for multimedia, mobile, graphics, and other applications. Cool Chips IX organizers have also solicited original works on novel architectures and schemes for single- and multicore processors, embedded systems, and reconfigurable computing, among other topics.

Cool Chips, taking place in Yokohama, Japan, is sponsored by the IEEE Computer Society Technical Committees on Microprocessors and Microcomputers, and Computer Architecture. Co-sponsors include the Institute of Electronics, Information, and Communication Engineers Electronics Society, the ACM Special Interest Group on Computer Architecture, and the Information Processing Society of Japan.

For more conference information, visit www.coolchips.org.

25-29 April: IPDPS 2006

The International Parallel and Distributed Processing Symposium serves as a forum for engineers, scientists, and researchers to present new...
findings in parallel processing and distributed computing. The five-day conference features contributed papers, invited speakers, panels, and commercial presentations.

Scheduled workshop topics at IPDPS 2006 include heterogeneous computing, Java for parallel and distributed computing, communication architecture for clusters, and reconﬁgurable architectures. For the third consecutive year, IPDPS participants will also have the opportunity to organize informal birds-of-a-feather sessions.

IPDPS 2006, located this year in Rhodes, Greece, is sponsored by the IEEE Computer Society Technical Committee on Parallel Processing in cooperation with the ACM Special Interest Group on Computer Architecture, the IEEE Computer Society Technical Committee on Computer Architecture, and the IEEE Computer Society Technical Committee on Distributed Processing.

To learn more about IPDPS 2006, visit www.ipdps.org/ipdps2006/.

16-19 May:
CCGrid 2006

The sixth in a series of successful international conferences, CCGrid 2006 takes place this year for the first time in Southeast Asia. To be held in Singapore, the conference will provide researchers and practitioners with an opportunity to share their research and experience in working through today’s challenges in Web services and grid technology.

Organizers have sought papers on topics that include the Web Services Flow Language, peer-to-peer computing, information services, resource exchange architectures, and middleware for clusters and grids.

Several workshops are to run concurrently with CCGrid 2006, including symposia on collaborative and learning applications of grid technology, cluster security, biomedical computations, and agent-based grid computing.

CCGrid is sponsored by the IEEE Computer Society Technical Committee on Scalable Computing. Visit http://pdcc.ntu.edu.sg/ccgrid2006/ for registration and program information as it becomes available.

20-28 May:
ICSE 2006

For 28 years, the International Conference on Software Engineering has provided researchers, practitioners, and educators the opportunity to present and discuss trends in the software engineering field. In addition to keynote speeches and other presentations, ICSE 2006, in Shanghai, will include a doctoral symposium for PhD students.

Topics to be addressed at ICSE 2006 include software engineering principles, theories, techniques, and tools as well as other related areas such as programming languages, distributed systems, databases, and networks.

Several software engineering-related conferences and symposia are scheduled to run concurrently with ICSE, including the New Software Engineering Faculty Symposium and the combined Software Process Workshop and Workshop on Software Process Simulation and Modeling.


21-24 May:
Security and Privacy 2006

Since 1980, the IEEE Symposium on Security and Privacy has been a premier forum for presenting developments in computer security and electronic privacy and for bringing together researchers and practitioners in the field. For 2006, conference organizers have solicited papers on topics that include distributed systems security, electronic privacy, information flow, and intrusion detection, among others. A new initiative this year opens the symposium to not only traditional full-length paper submissions, but also short papers describing less mature works in progress.

The Security and Privacy conference, set in Berkeley, California, is sponsored by the IEEE Computer Society Technical Committee on Security and Privacy, in cooperation with the International Association for Cryptologic Research. See www.ieee-security.org/TC/SP-Index.html for more conference information.

04-07 July:
ICDCS 2006

Since 1979, the International Conference on Distributed Computing Systems, the oldest conference series in the field of distributed computing systems, has provided a forum for engineers and scientists in academia, industry, and government to discuss the latest research findings on topics including agents and mobile code, middleware, and ubiquitous computing. ICDCS 2006 will take place in Lisbon, Portugal.

Scheduled workshops include the Second International Workshop on Incentive-Based Computing (IBC), the 8th International Workshop on Multimedia Network Systems and Applications (MNSA), the 6th International Workshop on Smart Appliances and Wearable Computing (IWSAWC), and the 5th International Workshop on Distributed Event-Based Systems (DEBS).

ICDCS is presented by the IEEE Computer Society Technical Committee on Distributed Processing (TCDP). Visit http://icdcs2006.di.fc.ul.pt for program highlights and more conference information.

Proceedings from many conferences are available through the Computer Society Digital Library. CSDL

QUALIFICATIONS AND REQUIREMENTS
Candidates for any Computer Society editor-in-chief position should possess a good understanding of industry, academic, and government aspects of the specific publication’s field. In addition, candidates must demonstrate the managerial skills necessary to process manuscripts through the editorial cycle in a timely fashion. An editor in chief must be able to attract respected experts to his or her editorial board. Major responsibilities include

- actively soliciting high-quality manuscripts from potential authors and, with support from publication staff, helping them publish their manuscripts;
- identifying and appointing editorial board members, with the concurrence of the Publications Board;
- selecting competent manuscript reviewers, with the help of editorial board members, and managing timely reviews of manuscripts;
- directing editorial board members to seek special-issue proposals and manuscripts in specific areas;
- providing a clear, broad focus through promotion of personal vision and guidance where appropriate; and
- resolving conflicts or problems as necessary.

Applicants should possess recognized expertise in the computer science and engineering community, have editorial experience, and be able to lead an active editorial board and work effectively with technical and publishing professionals. Applicants must have employer support.

SEARCH PROCEDURE
Prospective candidates are asked to provide, by 31 March, a complete curriculum vitae, a brief plan for the publication’s future, and a letter of support from their institution or employer. Materials should be sent as PDF files to the staff coordinators listed below. Contact information for each publication follows.

- Computer: Scott Hamilton, shamilton@computer.org.
- IEEE Internet Computing: Rebecca Deuel, rdeuel@computer.org.
- IEEE Micro: Janet Wilson, jwilson@computer.org.
- IEEE Transactions on Computers: Alicia Stickley, astickley@computer.org.

REAPPOINTMENTS
Several other IEEE Computer Society publications have editors in chief who are currently standing for reappointment to a second two-year term. The IEEE Computer Society Publications Board invites comments upon the tenures of the individual editors and welcomes suggestions for the future of each periodical.

Editors in chief seeking reapppointment to terms in 2007-2008 are Norm Chonacky, Computing in Science and Engineering; Jim Hendler, IEEE Intelligent Systems; Xingdong Wu, IEEE Transactions on Knowledge and Data Engineering; Nitin Vaidya, IEEE Transactions on Mobile Computing; and David Kriegman, IEEE Transactions on Pattern Analysis and Machine Intelligence.

Send comments to:
- Computing in Science and Engineering: Jennifer Ferrero, jferrero@computer.org.
- IEEE Intelligent Systems: Dennis Taylor, dtaylor@computer.org.
- IEEE Transactions on Knowledge and Data Engineering: Alicia Stickley, astickley@computer.org.
- IEEE Transactions on Mobile Computing: Alicia Stickley, astickley@computer.org.
- IEEE Transactions on Pattern Analysis and Machine Intelligence: Alicia Stickley, astickley@computer.org.