



Computer Society Offers a Wide Array of Products and Services in 2005

The IEEE Computer Society has been at the forefront of developments in computer engineering since its founding in 1946. With more than 8,800 members at the close of its first decade, the Society now serves more than 88,000 computing professionals. As a fledgling organization, the Society made a name for itself in the 1950s by hosting conferences on key topics. Advancement in publications was not far behind: Society periodicals accounted for 1,800 entries in the computer engineering canon in that timeframe.

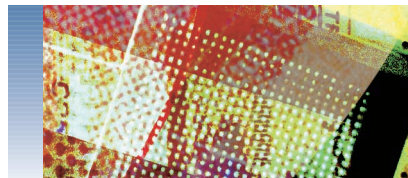
As we begin 2005, the Society again offers conferences—about 150, covering research areas large and small—and periodicals—14 magazines and 14 transactions that also address all aspects of computer engineering. True to its mission of being a leading provider of technical information for computer professionals, the Society remains grounded in its traditions but also offers valuable career-enhancing resources in media that capitalize on current technologies.

As Society President Gerald Engel indicates in his President's Message on p. 7, the Society is operating from a new strategic plan starting in 2005—one that positions the Society to provide members with trusted products and interoperable services to better serve the profession and advance members' careers.

The following overview demonstrates the ways in which we continue to build on our past and look forward to the future.

CONFERENCES

IEEE Computer Society technical councils, task forces, and technical committees host the majority of the



Society's technical meetings each year. These conferences provide a glimpse into the depth and breadth of Society-sponsored events.

31 January-04 February: SAINT 2005

Researchers from around the world will gather this year in Trento, Italy, to share new ideas and findings regarding the Internet and its applications. Participants in the 2005 Symposium on Applications and the Internet will have an opportunity to learn about the latest developments in Internet content management systems, wireless and mobile Internet services, network and protocol architecture, and Internet applications standards such as XML, SOAP, Java, and .NET.

Panel sessions at SAINT 2005 will discuss service platform and network infrastructure for ubiquitous services; the realities, potentials, and barriers of service-oriented applications; and the future of Internet applications.

SAINT, cosponsored by the Information Processing Society of Japan, is the flagship conference of the IEEE Computer Society Technical Committee on the Internet. Fees are \$540 for members who register before 2 January, \$670 for nonmembers, and \$285 for students. Late and on-site registration is \$670 for members, \$835 for nonmembers, and \$340 for students. Visit www.saint2005.org for more conference information.

12-16 March: IEEE VR 2005



Practitioners in virtual reality systems, software, and applications will come together at the 2005 IEEE Virtual Reality Conference 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 set to appear at VR2005 is an extensive exhibition of the latest tools and products available to the VR community.

VR 2005, located this year in Bonn, Germany, tops the Computer Society Technical Committee on Visualization and Graphics' annual slate 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.vr2005.org.

04-05 April: ECBS 2005



The 12th Annual IEEE International Conference and Workshop on the Engineering of Computer-Based Systems is dedicated to formulating and advancing methods, techniques, and tools for the engineering of computer-based systems.

Participants at ECBS 2005 will address topics that include life-cycle processes and process evolution; integration engineering; system-on-chip designs; and model-based system development. Organizers have scheduled workshops on several other key topics,

and have invited representatives from industry to present brief papers in an associated industrial track.

The IEEE Computer Society Technical Committee on the Engineering of Computer-Based Systems sponsors ECBS 2005, which is set to take place in Greenbelt, Maryland. Visit <http://abe.eng.uts.edu.au/ECBS2005/> for more information, including deadlines.

**04-08 April:
ICDE 2005**

ICDE 2005 TOKYO The 21st International Conference on Data Engineering, set this year in Tokyo, offers an opportunity for researchers to present findings on data-intensive applications and on data and knowledge engineering issues.

Organizers of ICDE 2005 have scheduled seminars on Web service coordination and standards, data mining techniques for microarray datasets, rank-aware query processing and optimization, and data stream query processing.

ICDE 2005 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.

Visit the ICDE 2005 Web site at <http://icde2005.is.tsukuba.ac.jp/> for further details. Members of the IEEE and/or the IEEE Computer Society are eligible for discounts on conference fees.

**04-08 April:
IPDPS 2005**



Now in its 19th year, the International Parallel and Distributed Processing Symposium serves as a forum for engineers and scientists to present findings in parallel processing and distributed computing. The five-day conference will feature contributed papers, invited speakers, panels, and commercial presentations.

Scheduled workshop topics at IPDPS 2005 include systems and network security, management tools for large-scale parallel systems, high-performance computational biology, and nature-inspired distributed computing. For the second consecutive year, IPDPS participants will also have the opportunity to organize informal birds-of-a-feather sessions.

IPDPS 2005, set this year in Denver, 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. More information on IPDPS 2005 is available at www.ipdps.org/ipdps2005/.

**20-22 April:
Cool Chips VIII**



COOL Chips VIII For eight years, the Cool Chips conference has invited researchers and practitioners to present research results in all areas of microprocessors and their applications. This year, the Cool Chips symposium will focus on low-power, high-performance processors for digital consumer electronics as well as on novel architectures and schemes for dependable computing and wireless systems. Cool Chips VIII organizers are again soliciting original works on cool software solutions, including binary translations, compiler issues, and low-power techniques.

Cool Chips VIII, taking place in Yokohama, Japan, is sponsored by the IEEE Computer Society Technical Committees on Microprocessors and Microcomputers and Computer Architecture. Cosponsors 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.

**08-11 May:
Security and Privacy 2005**



For more than 20 years, the IEEE Symposium on Security and Privacy has brought together researchers and practitioners to share developments in computer security and electronic privacy.

Workshop and tutorial topics will include intrusion detection, language-based security, biometrics, and peer-to-peer security. Again this year, the symposium will feature a session of five-minute talks, where attendees can present preliminary research results or

Computer Society Past President Willis King Named IEEE Fellow

Willis King, IEEE Computer Society president in 2002, was recently named an IEEE Fellow by the IEEE Board of Directors “for contributions to computer science and engineering education.”

Since 1970, King has maintained strong ties to the IEEE Computer Society. In addition to serving as Society president, King has served as vice president for area activities, vice president for educational activities, vice president for conferences and tutorials, and cochair of the Latin America Initiative. He has been a professor in the Department of Computer Science at the University of Houston since 1969, serving as department chair from 1979 to 1992.

Each year, the IEEE Board of Directors confers the title of Fellow upon a select group of members. The title recognizes an extraordinary record of achievement in any IEEE field of interest. For information on nominating a colleague to the rank of Fellow, see www.ieee.org/about/awards/fellows/fellows.htm.

summaries of works published elsewhere. 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.

09-12 May: CCGrid 2005

CCGrid05 CCGrid 2005 is designed to bring together pioneering researchers, developers, and users of clusters, networks, and grid architectures and applications. Cluster-powered grids not only provide a cost-effective means of problem solving, they also promise to support a more collaborative approach to the use of distributed resources.

CCGrid 2005's organizers have invited papers on topics that include middleware for clusters and grids; dynamic optical network architectures for grid computing; parallel file systems; scheduling and load balancing; and performance evaluation and modeling.

CCGrid 2005 is sponsored by the IEEE Computer Society Task Force on Cluster Computing and the IEEE Technical Committee on Scalable Computing, in conjunction with the ACM. Visit www.cs.cf.ac.uk/ccgrid2005/ for registration and program information as it becomes available.

15-21 May: ICSE 2005



Software permeates every aspect of society—at home and at work, in business and for pleasure, to support daily tasks, and to plan and manage the future. Users increasingly expect it to be available, reliable, safe, secure, and usable, despite challenges of mobility, unpredictability, and shifting requirements.

The 27th International Conference on Software Engineering, set this year in St. Louis, Missouri, provides a

forum for researchers, practitioners and educators to present and discuss the most recent innovations, trends, experiences, and concerns in the field of software engineering. Several software engineering-related workshops are scheduled to run concurrently with ICSE 2005, including SELMAS 05, the Fourth International Workshop on Software Engineering for Large-Scale Multi-Agent Systems; and MSR 05, the International Workshop on Mining Software Repositories.

Visit the conference Web site at www.cs.wustl.edu/icse05/Home/index.shtml for more details on ICSE 2005.

6-9 June: ICDCS 2005



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

Expert papers presented at the conference are set to address topics that

include distributed operating systems, fault tolerance and dependability, Internet computing and applications, and mobile code and agents.

ICDCS 2005, sponsored by the IEEE Computer Society Technical Committee on Distributed Processing, will take place in Columbus, Ohio. In conjunction with the 25th anniversary of ICDCS, a DVD containing the proceedings of ICDCS 2005 and the past 24 conferences will be issued to conference attendees. Visit www.cis.ohio-state.edu/icdcs05/ for program highlights and more information on ICDCS.

Proceedings from many conferences are available through the Computer Society Digital Library. CSDL subscribers enjoy full access to an online collection that also includes the entire content of all of our magazines and most of our journals. Nonsubscribers can also search the collection, available at www.computer.org/publications/dlib/, and purchase individual pieces.

IEEE Computer Society members enjoy as much as a 25 percent discount on registration fees at Society-sponsored conferences. Visit www.computer.org/conferences/ for a full list of conferences, symposia, and technical meetings.

Nominations Open for IEEE Division VIII Director-Elect

IEEE Computer Society members are invited to submit nominations for candidates to serve as 2006 IEEE Division VIII director-elect and 2007-2008 Division VIII director.

Division directors represent the members of IEEE societies on the IEEE Board of Directors and the Technical Activities Board; Division V and VIII directors represent the Computer Society membership. Elections for Division V director are typically held in even-numbered years, and Division VIII elections are held in odd-numbered years. The elected representative then serves one year in the director-elect role before assuming a two-year division director term.

IBM's Gene Hoffnagle currently serves as IEEE Division V director for 2004-2005. Past president Steve Diamond serves as IEEE Division VIII director for 2005-2006. Oscar Garcia was elected in November 2004 to serve as IEEE Division V director-elect for 2005.

Submit nominations by **11 February** to Carl K. Chang, Chair, Nominations Committee, IEEE Computer Society, 1730 Massachusetts Ave. NW, Washington, DC 20036-1992, or c.chang@computer.org.

PUBLICATIONS

Recognizing that computer professionals may specialize in one area but require information in others, the Computer Society for many years has offered members, for a low annual fee, access to an online digital library that contains cover-to-cover content from all 14 Society magazines, all Society-exclusive and most Society-cosponsored transactions, many Society-sponsored and other leading conferences, and a number of tutorials and scholarly books. This all-in-one Computer Society Digital Library account, available in 2005 for \$118, allows members

to sample from a breadth of information resources. Traditional single-magazine subscriptions are also available in print, online, or joint formats.

In 2004, the Society made improvements to enhance the member experience on the Digital Library area of our site. 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.

Individual magazine and journal editorial boards strive to provide members

with the targeted quality content that has been the hallmark of Computer Society publications for more than 50 years. *IEEE Software*, *IEEE Internet Computing*, and *IEEE Transactions on Software Engineering*—which has been in continuous publication for 31 years—still enjoy a significant following of loyal subscribers. The success of newer titles such as *IT Pro*, *IEEE Security and Privacy*, and last year's newly launched *IEEE Transactions on Dependable and Secure Computing* and *IEEE/ACM Transactions on Computations Biology and Bioinformatics* indicate that we have met our goal of

IEEE Computer Society Publications Seek Editors in Chief for 2005-2006 Terms

The IEEE Computer Society seeks applicants for the editor-in-chief positions for the following periodicals for terms starting 1 January 2006: *IEEE Design & Test of Computers*, *IEEE MultiMedia*, *IEEE Pervasive Computing*, *IEEE Transactions on Software Engineering*, *IEEE Transactions on Parallel and Distributed Systems*, and *IT Professional*.

In addition, the search committee for *IEEE Distributed Systems Online* is considering current editor in chief Jean Bacon for reappointment. To provide feedback on Bacon's contributions to this magazine, see <http://dsonline.computer.org/eic.htm>.

Qualifications and Requirements

Candidates for any Computer Society editor-in-chief position should possess a good understanding of the 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 the publication's editorial board. Major responsibilities include

- actively soliciting high-quality manuscripts from potential authors and, with support from the publication staff, helping these authors to get their manuscripts published;
- 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 a personal vision and providing 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 clear employer support.

Search Procedure

Prospective candidates are asked to provide, by 15 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 search committee chair for the appropriate publication. Contact information for each search committee coordinator follows:

- *IEEE Design & Test of Computers*. Contact: Janet Wilson, jwilson@computer.org.
- *IEEE Distributed Systems Online*. Contact: Rita Scanlan, rscanlan@computer.org.
- *IEEE MultiMedia*. Contact: Robin Baldwin, rbaldwin@computer.org.
- *IEEE Pervasive Computing*. Contact: Shani Murray, smurray@computer.org.
- *IEEE Transactions on Software Engineering*. Contact: Suzanne Werner, swerner@computer.org.
- *IEEE Transactions on Parallel and Distributed Systems*. Contact: Suzanne Werner, swerner@computer.org.
- *IT Professional*. Contact: Janet Wilson, jwilson@computer.org.

providing timely coverage on new research fields as they emerge.

Members can become more involved with the Society's publications program by becoming authors, reviewers, or even editorial board members. Visit the Computer Society's publications section on the Web to find more information on the periodicals of your choice. Also, a number of magazines are seeking new editors in chief for 2005. To find out more about these positions, see the "IEEE Computer Society Publications Seek Editors in Chief for 2005-2006 Terms" sidebar.

IEEE COMPUTER SOCIETY ONLINE BOOKSHELF

In a new venture, the Society also started offering a unique online collection of technical books in 2004. Society members can enjoy free access to the Computer Society Online Bookshelf, a group of IT-themed books from more than 90 publishers including Oxford Press, Wiley, Microsoft, and MIT Press. The Online Bookshelf is available through a partnership with Books24x7, a subsidiary of SkillSoft, and is composed of a subset of 100 unabridged books from Books24x7's ITPro collection.

Titles on the Computer Society Online Bookshelf are available for viewing through a customizable Referenceware online interface. Topics include networks and protocols, programming languages, certification and compliance, business and culture, desktop applications, databases, security, telecommunications, operating systems, ReferencePoint suites, software engineering, and Web development.

Volunteers organizing the Online Bookshelf select a set of 100 books, updated periodically, that are free to all members. Additional titles are available at reduced rates. For \$89, members can access a 500-book collection. For \$299, members can access Books24x7's full 2,500-book collection.

Books24x7 provides Web-based digital technical and business reference content to more than a million sub-

scribers. Books24x7's Referenceware platform enables users to search, browse, read, and interact with the content of several select professional reference libraries.

Complete title lists, as well as registration information, for the Computer Society's Books 24x7 collections are available at www.computer.org/bookshelf/.

DISTANCE LEARNING CAMPUS

In another offering that recognizes the ubiquity of the Internet, the Computer Society has for the past several years offered members free access to a wide range of Web-based courses through our Distance Learning Campus.

Twice each year, volunteers evaluate survey data and member profile records to update the selection of new Distance Learning offerings. The courses, selected from a rotating catalog of more than 300 offerings, cover a variety of computing topics such as CompTIA networks, HTML coding, Microsoft applications, Cisco networks, Windows security, Oracle databases, Unix systems, and Sun Microsystems technologies.

Offered in partnership with KnowledgeNet, courses in the Distance Learning catalog offer presentations

with voiceovers, 3D graphics, flash animations, on-screen text, and visual sentences that turn complex concepts into easy-to-understand images. Users can take preassessment 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 <http://bell.computer.org/distancelearning/index.htm>.

In the late 1940s and early 1950s, the Computer Society—then known as the American Institute of Electrical Engineers' Subcommittee on Large-Scale Computing—set out to disseminate research findings and tackle professional development issues facing computer engineers. More than 50 years later, although the technology has changed, the Society's mission remains essentially the same. We invite you to make the most of your membership in 2005, building on the past and looking to the future. ■

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JOIN A THINK TANK

Looking for a community targeted to your area of expertise? IEEE Computer Society Technical Committees explore a variety of computing niches and provide forums for dialogue among peers. These groups influence our standards development and offer leading conferences in their fields.

Join a community that targets your discipline.

In our Technical Committees, you're in good company.

www.computer.org/TCsignup/