Society Magazines Plan Coverage for 2009

Since its founding in 1946, the IEEE Computer Society has dedicated itself to advancing the theory, practice, and application of computer and information processing technology. The Society aims to continue that tradition in 2009 by offering a slate of 13 magazines covering key topics in computing that include software, IT applications, microprocessors, and security.

**Computer**  
*Computer*, the flagship publication of the Computer Society, publishes peer-reviewed technical content that defines the cutting edge of computer science, computer engineering, technology, and applications, accompanied by news articles, departments, monthly columns, and thought-provoking opinion pieces from respected computing professionals.

Each January, *Computer* publishes an Outlook issue that highlights emerging technologies that promise to reshape the computing landscape. In 2009, key topics will include runtime modeling, extreme-scale computing, and nanoarchitecture.

Researchers use the term model-driven engineering to describe software development approaches that manage complexity through the use of software models. Focusing on the best of recent research from the modeling community, *Computer* plans an October special issue on models@run.time. It will also offer a June special issue on software engineering ethics in a digital world, addressing issues related to privacy, monitoring, data protection, and other challenges.

For current highlights, classic articles, and complete guidelines for prospective authors, visit www.computer.org/computer. A digital edition of *Computer* is available at http://qmags.com/cmg.

**IEEE Security & Privacy**  
*IEEE Security & Privacy* magazine presents best practices and tracks late-breaking advances in information assurance and security for a broad cross-section of the professional community.

The magazine will devote its July/August issue to an exploration of computer-aided validation and verification of architectures for complex systems, the September/October issue will address challenges in securing the domain name system (DNS), and the November/December issue will examine the threat that “insiders” pose to data security.

*S&P*’s regular departments include Building Security In, which examines emerging developments in secure coding issues, and Secure Systems, which explores new topics in system security.

See www.computer.org/security for Web extras including podcasts, exclusive articles, and conference presentations.

**IEEE Internet Computing**  
At the dynamic crossroads between academic researchers and software professionals, *IEEE Internet Computing* presents novel content from academic and industry experts on a wide range of topics, including Internet security, applications, architectures, middleware, information management, policies, and standards. It applies theory to the practice of building Internet systems and feeds the experience of Internet system construction and usage back into research and emerging theory. The
The Computer Society’s IT Professional magazine is a bimonthly publication for developers and managers of enterprise information systems. IT Pro addresses areas that include Internet security, emerging technologies, Web services, data management, software development, enterprise architectures and infrastructures, systems integration, and wireless networks.

In its January/February issue, IT Pro will focus on cloud services and cloud computing. Throughout the year, the magazine will explore topics that include enterprise cybersecurity, data center design, strategic information system planning, and deployment management.

Visit the magazine’s website at www.computer.org/itpro for selected articles, complete author guidelines, and links to archived content.

Astronomy, medicine, physics, and other hard sciences require efficient algorithms, system software, and computer architectures that can address large-scale computational problems. The Computer Society’s Computing in Science & Engineering magazine covers topics that range from computational physics, grid computing, and educational techniques to computer simulations, scientific programming, and large-scale visualizations.

CiSE will devote its March/April issue to recent research in computational astrophysics. Later issues will address topics that include computational material science, petascale computing, and software engineering. In addition to full-length articles, CiSE offers departments that cover news and analysis, education, industrial applications, book and Web reviews, scientific programming, grid computing, visualization, and reports from key conferences.


See the magazine’s website at www.computer.org/cise for selected articles, subscription information, and complete author guidelines.

In 2009, IEEE Micro magazine will publish original works that reach an international audience of computer system designers, users, and system integrators. Micro highlights current topics in computer systems, from energy-efficient embedded devices, to data center computing, to the fastest supercomputers.

A January/February “Top Picks” issue will feature Micro’s selections of the best papers from the major computer architecture conferences of 2008. Best papers from the Hot Chips 20 conference are scheduled to run in Micro’s March/April issue.

Later, Micro will explore new developments in embedded multicore systems.

See www.computer.org/micro for current highlights and more information on upcoming special issues.

IEEE Computer Graphics and Applications magazine bridges the theory and practice of computer graphics, addressing everything from specific algorithms to full-system implementations. CG&A offers a unique combination of peer-reviewed feature articles and informal departments, including product announcements. Leading researchers guest-edit themed issues that track the latest developments and trends in computer graphics.

CG&A’s March/April special issue looks at advances in serious games, while its May/June issue features articles on the current and future state of evaluation in visualization. Other issues will highlight the virtual populace, collaborative visualization, and interactive 3D.

For recent articles, links to archived content, detailed calls for papers, and a complete editorial calendar, visit www.computer.org/cga.

IEEE Intelligent Systems magazine provides peer-reviewed, cutting-edge articles on the theory and applications of systems that perceive, reason, learn, and act intelligently. In 2009, Intelligent Systems will present a March/April issue on artificial intelligence and cultural heritage and a September/October issue on transforming e-government and e-participation. Other issues throughout the year will address topics that include agents and data mining, society online, and human-level intelligence.

Intelligent Systems targets an audience of software engineers, systems designers, information managers, knowledge engineers, researchers, and professionals in such fields as finance, manufacturing, medicine, defense, and the sciences.

The IEEE Computer Society publishes Intelligent Systems in technical cosponsorship with the British Computer Society, the European Coordinating Committee for Artificial Intelligence, and the American Association for Artificial Intelligence. Members of these
organizations are eligible for a discount on subscriptions to the magazine.

See www.computer.org/intelligent for selected articles, a calendar of AI-related conferences, and a free downloadable trial issue.

Throughout 2009, IEEE MultiMedia magazine will publish articles about innovative multimedia and recent breakthroughs in the field. The quarterly publication serves a community of scholars, developers, practitioners, and students who are interested in using multiple media types to create new experiences. MultiMedia will kick off 2009 with a January-March issue covering recent research on intelligent pervasive multimedia systems. Other issues throughout the year will highlight the many faces of multimedia semantics, and multimedia metadata and semantic management, along with a broad selection of articles on current multimedia technology and practice.

In addition to technical articles, the quarterly magazine offers columns on ways in which art and technology intersect, multimedia standards, real-world projects in multimedia, product descriptions, and announcements of conferences and workshops. MultiMedia also features visionary articles about where the field is headed as well as an opinion column about new technologies and developments in multimedia.

IEEE Pervasive Computing magazine serves the growing ranks of managers, engineers, application developers, and researchers who are involved in creating tomorrow’s mobile communication systems. Pervasive Computing presents expert perspectives on hardware technologies and software infrastructure for ubiquitous computing, sensing and interaction with the physical world, the graceful integration of human users, and systems considerations that include scalability, security, and privacy.

In 2008, Pervasive Computing will publish a January-March issue on environmental sustainability, another issue later in the year will focus on smarter phones, and a full slate of other articles will address cutting-edge research and practices in mobile and ubiquitous computing.

Visit www.computer.org/pervasive for submission guidelines and links to related content.

IEEE Design & Test focuses on current and near-future practice and includes real-world case studies, how-to articles, and tutorials. Its readers include users, developers, and researchers concerned with the design and test of chips, assemblies, and integrated systems.

Kicking off 2009, the January/February issue will look at IEEE Standard 1500 and its usage. The March/April issue will focus on managing emerging SoC development, and May/June will highlight metamodeling for design and test. Other themes coming up in 2009 will address high-level synthesis and 3D IC design and test.

The IEEE Computer Society publishes Design & Test in technical cosponsorship with the IEEE Circuits and Systems Society.

See www.computer.org/dt to view calls for papers, selected highlights from past issues, or instructions on how to volunteer as a reviewer.

IEEE Annals of the History of Computing Featuring scholarly articles by leading computer scientists and historians, as well as firsthand accounts by computer pioneers, IEEE Annals of the History of Computing is the primary publication for documenting, analyzing, and exploring the history of computing. The quarterly magazine regularly calls upon computer pioneers to share firsthand accounts of significant historical moments.

Highlights in 2009 will include a history of Asian language processing, as well as perspectives on applications in computing, the history of computer games, and the history of database management systems.

The entire collection of Annals, from 1979 to the present, is available online in the IEEE Computer Society digital library archives. An extensive collection of Web-only exclusive content, including tutorials and anecdotes, is also available online.

See www.computer.org/annals for selected articles, biographies of prominent computing pioneers, and other resources.

IEEE Computer Society publications are available to members via print subscriptions, RSS feeds, digital editions, and through the online Computer Society Digital Library, available at www2.computer.org/portal/web/csdl. Computer Society members pay $129 for a full-year, all-access subscription. To subscribe, visit www2.computer.org/portal/web/csdl/subscribe.
Computer Society Presents Technical Awards

The IEEE Computer Society awards program recognizes both technical achievement and service to the Society and the profession. Technical awards honor pioneering and significant contributions to the field of computer science and engineering. Service awards recognize both volunteers and staff for well-defined and highly valued contributions to the Society.

Recently, the Society honored two outstanding individuals for technical contributions. To learn more about IEEE Computer Society awards, visit http://awards.computer.org.

WILLY ZWAENEOPEL WINS KANAÏ AWARD

Willy Zwaenepoel, a professor and dean at the French Federal Polytechnical School at Lausanne (EPFL), recently received the IEEE Computer Society Tsutomu Kanai award for major contributions to state-of-the-art distributed computing systems and their applications. Zwaenepoel is known for his work on the Treadmarks distributed shared memory system, which later became the basis for Intel’s OpenMP cluster product. His work on high-performance software for network I/O led to the creation of iMimic Networking, which he led from 2000 to 2005. His current projects include database replication, I/O performance of virtual machines, and software update mechanisms.

His citation reads, “For contributions to cluster-based distributed computing for scientific and web applications.”

Zwaenepoel received a BS from the University of Ghent and an MS and PhD from Stanford University. He served on the faculty at Rice University from 1984 to 2002 and was formerly associate editor of IEEE Transactions on Parallel and Distributed Systems. Zwaenepoel’s research interests lie in all aspects of distributed computing. While at Stanford, he was involved in the design and implementation of the V-System. At Rice, he worked on two distributed shared memory systems, Munin and TreadMarks, on checkpoint/restart through coordinated checkpointing, and message logging in the Manetho system.

In 2000, Zwaenepoel received Rice’s Graduate Student Association Teaching and Mentoring Award. He is also a Fellow of the IEEE and the ACM. Zwaenepoel will receive the Kanai Award in March 2009 during the Ninth International Symposium on Decentralized Systems in Athens, Greece.

Established in 1995 in honor of Hitachi past president Tsutomu Kanai, the Kanai Award recognizes major contributions to state-of-the-art distributed computing systems and their applications. Winners receive a certificate, crystal memento, $10,000 honorarium, and a travel grant to attend two technical conferences.

KATHERINE L. MORSE RECEIVES KARLSSON HONORS

Katherine L. Morse, a technical Fellow at Science Applications International Corporation, recently received the IEEE Computer Society’s prestigious 2007 Hans Karlsson Award. For more than a decade, she has been a leading force in standardizing modeling and simulation technologies. Morse has made significant contributions to several key simulation interoperability standards and is internationally recognized for her technical innovations in modeling and simulation integration.

Her citation reads, “For leadership in development of modeling and simulation standards and exemplary collaboration in establishing the Simulation Interoperability Standards Organization Standards Activity Committee as an IEEE standards sponsor.”

Morse is currently chair of the SISO SAC. She received a BS, BA, and MS from the University of Arizona and an MS and PhD from the University of California, Irvine. She served as vice chair of the IEEE 1516 working and drafting group, and currently serves as vice chair of the IEEE Semiconductor Interface Specialists Conference. Morse continues to break new ground in distributed simulation through her work on HLA-ADL integration and the extensible modeling and simulation framework.

The Karlsson Award was established in 1992 in memory of Hans Karlsson, chairman and father of the IEEE 1301 family of standards. Winners receive a plaque and $2,000 honorarium in recognition of outstanding skills and dedication to diplomacy, team facilitation, and joint achievement in the development or promotion of standards in the computer industry where individual aspirations, corporate competition, and organizational rivalry could otherwise be counter to the benefit of society.