Computer Society Magazines
Plan 2007 Coverage

The IEEE Computer Society is dedicated to advancing the theory, practice, and application of computer and information processing technology. The Computer Society publishes 14 technical magazines that cover topics including Internet computing, microprocessors, graphics, test, and distributed systems. In 2007, Society publications will address broad trends, breaking developments, historical perspectives, and emerging issues in all aspects of the computing profession.

Computer
In addition to publishing influential peer-reviewed content of the highest caliber, Computer, the Computer Society’s flagship magazine, offers monthly columns, departments, news articles, and thought-provoking opinion pieces from computing professionals.

Each January, Computer publishes an Outlook issue that highlights emerging technologies that promise to reshape the computing landscape. In 2007, key topics include nanotechnology, car-based computing, and synthetic biology.

Reconfigurable computing systems based on combinations of conventional processors and field-programmable gate arrays have also gained attention in recent years. Computer’s February issue will offer a perspective on all aspects of high-performance reconfigurable computing. In its April issue, Computer will look at emerging issues in human-centered computing, which focuses on interactions and interface design, as well as designing algorithms and systems with a human focus from start to finish.

For current highlights, classic articles, and complete guidelines for prospective authors, visit www.computer.org/computer.

IEEE Distributed Systems Online (http://dsonline.computer.org) also features expert-moderated topic areas that highlight projects, conferences, and other resources on subjects including distributed agents, grid computing, operating systems, middleware, mobile and pervasive computing, and Web systems.

IEEE Software magazine focuses on what professional software developers, designers, testers, and managers want to know about new technologies, programming styles, tricks of the trade, and ways to build and improve high-quality systems. Its peer-reviewed articles cover the breadth of software engineering, especially

Recognize a Senior Member with IEEE Fellow Nomination

The IEEE Board of Directors is now accepting nominations for the 2007 class of IEEE Fellows. Recently, the board added an application engineer/practitioner category to join the existing categories of educator, technical leader, and research engineer/scientist. The additional category is intended to accommodate the growing number of nominations of individuals who have made their contributions to the profession as application engineers or engineering practitioners.

The board confers Fellow status upon individuals who have an extraordinary record of accomplishments in any of the IEEE fields of interest. A nominee must be a Senior Member of the IEEE at the time of nomination; be an active, dues-paying member; and must have completed five years of service in any grade of IEEE membership. New Fellows receive a brief citation describing their accomplishments.

All nominations, references, and endorsements can be submitted electronically. Recent upgrades to the electronic system include an automatic forwarding function for references and more printer-friendly nomination forms.

To nominate an IEEE Senior Member to Fellow status or to learn more about the program, visit www.ieee.org/fellows. Nominations are due by 1 March 2007.
Society Announces Merwin Scholarship Winners

The IEEE Computer Society Richard E. Merwin Student Scholarship honors a past president of the Computer Society and recognizes leaders in Society student branch chapters who show promise in their academic and professional efforts. The Society recently announced three scholarship winners for 2006-2007.

Sushil Chandiramani and Poulomi Asok Doshi of Thadomal Shahani Engineering College in Mumbai, India, and Mahalingam Venkataraman of the University of South Florida in Tampa will each receive $4,000, paid in four quarterly installments. The Society grants up to 10 Merwin scholarships each year. Active members of Computer Society student branch chapters who are juniors, seniors, or graduate students in electrical or computer engineering, computer science, or a computer-related field of engineering are eligible to apply. Applicants must be full-time students and have a minimum 2.5 GPA.

Winners of the Merwin scholarship serve as IEEE Computer Society Student Ambassadors for their IEEE regions. Student Ambassadors collect and disseminate information to Computer Society student chapters in their region and serve as liaisons to the Chapters Activities Board.

Other awards and scholarships that the Computer Society offers to students include the Lance Stafford Larson best student paper contest and the Upsilon Pi Epsilon/Computer Society Award for Academic Excellence, which is administered jointly by the IEEE Computer Society and the Upsilon Pi Epsilon international honor society.

Merwin Scholarship applications are due by 31 May 2007. For more information on IEEE Computer Society student scholarship and award opportunities, visit www.computer.org/students/schlrship.htm.

areas of technology transfer where researchers and practitioners can stimulate one another’s work.

*Software’s* January/February issue will look at the software engineering challenges that small companies face and suggest practical, state-of-the-art solutions. Other 2007 issues will explore stakeholders’ desires and needs via requirements engineering and address test-driven development, service-oriented architectures, and rapid application development using dynamically typed languages.

See www.computer.org/software/ for free articles, a sample issue, calls for papers, RSS feeds, and a complete editorial calendar.

*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 January/February issue to malware and rootkits, and the May/June issue will examine strategies for managing organizational security.

*S&P*’s regular departments include Attack Trends, which examines emerging developments in attacks, phishing, and malware, and Building Security In, which explores how to factor security into product development from the onset, rather than tacking it on later.

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

**Internet Computing** *IEEE Internet Computing* provides journal-quality evaluation and review of emerging and maturing Internet technologies and applications. The magazine targets the technical and scientific Internet user communities as well as designers and developers of Internet-based applications and enabling technologies. *IC* publishes refereed articles on the latest developments and key trends in Internet technologies and applications.

A crossroads between software professionals and academic researchers, the magazine presents novel content from academia and industry on a range of topics including applications, architectures, information management, middleware, policies, security, and standards. *IC*’s January/February 2007 issue will focus on autonomic computing. Future themes for the year include roaming, distance learning, content-distribution networks, and knowledge management.

Key articles from *IC* are also available on the Computer Society’s Web site through *IEEE Distributed Systems Online* at http://dsonline.computer.org/portal/site/dsonline/. See www.computer.org/internet/ for information on subscribing to or writing for the magazine.

**IT Professional** *IT Professional* magazine features high-quality, peer-reviewed coverage of enterprise computing systems. *IT Pro* offers managers and administrators practical how-to advice on topics such as the impact of emerging regulatory issues and the cost versus benefit considerations that are driving the recent move to widespread outsourcing.

In its January/February 2007 issue, *IT Pro* will focus on strategies and tools for enterprise search. Throughout the year, the magazine will address topics including cybersecurity management; service reliability and trustworthiness; and Web 2.0 technologies, services, and applications.

Visit the magazine’s Web site at www.computer.org/itpro/ for selected articles, complete author guidelines, and links to archived content.
Physics, medicine, astronomy, and other hard sciences require efficient algorithms, system software, and computer architectures that can address large-scale computational problems. *Computing in Science & Engineering* magazine covers topics that range from grid computing, computational physics, and educational techniques to scientific programming, computer simulations, and large-scale visualizations.

*CiSE* will devote its March/April 2007 issue to highlighting problems in the stochastic modeling of complex systems. Later issues in 2007 will address topics that include Python and high-performance computing in defense applications.

*CiSE* is copublished by the IEEE Computer Society and the American Institute of Physics in technical cosponsorship with the IEEE Antennas and Propagation Society and the IEEE Signal Processing Society.

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

IEEE *Micro* magazine will publish original works that discuss the design, performance, and application of microcomputers and microprocessor systems. *Micro* reaches an international audience of microcomputer and microprocessor users, designers, and system integrators.

A January/February “Top Picks” issue will feature *Micro*’s selections of the best papers from the major microarchitecture conferences of 2006. Best papers from the Hot Chips 18 conference are scheduled to run in *Micro*’s March/April issue. Later, *Micro* will explore new developments in architecture and design, with an emphasis on performance evaluation and workload characterization.

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

IEEE *Computer Graphics and Applications* magazine covers late-breaking developments in computer graphics technology, offering research features, regular departments, and columns from professionals in the computer graphics industry.

*CG&A*’s January/February 2007 special issue on sketching highlights the frontier of sketching systems in educational, scientific, and design domains. In its July/August issue, *CG&A* will present innovative results and concepts in the domain of 3D documents. A November/December theme issue on real-time interaction with complex models finishes out the year.

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

**Computer Society Transactions Address Key Topics in 2007**

IEEE Computer Society transactions are scholarly archival journals designed to document the state of the art in several specialized fields related to computers and computing. Society transactions offer in-depth, specialized coverage of specific topic areas. Throughout the year, many transactions print special issues that address key topics in their respective fields. Offering subscribers the latest peer-reviewed content, Computer Society transactions often invite authors from leading conferences to expand upon their conference papers and submit them for publication.

In 2007, *IEEE Transactions on Computers* plans coverage that includes a February issue on nanosystems and computing, as well as an August issue on emergent systems, algorithms, and architectures for speech-based human-machine interaction. Also in August, *IEEE Transactions on Parallel and Distributed Systems* will publish a special issue on chip multiprocessor architectures.

*IEEE Transactions on Dependable and Secure Computing* plans a July-September issue addressing hot topics raised at the 2007 IEEE Symposium on Security and Privacy. *IEEE/ACM Transactions on Computational Biology and Bioinformatics* will publish an April-June issue expanding on key findings from the annual International Workshop on Bioinformatics Research and Applications.

*IEEE Transactions on Pattern Analysis and Machine Intelligence* will feature an issue on biometrics in July, while *IEEE Transactions on Knowledge and Data Engineering* plans to highlight the Semantic Web and information systems in February and knowledge data management in June.

In its November/December issue, *IEEE Transactions on Visualization and Computer Graphics* will again feature full conference proceedings from the annual IEEE Visualization conference and the associated IEEE Symposium on Information Visualization. *TVCG’s* January/February issue will offer papers from top presenters at the ACM Symposium on Virtual Reality Software and Technology.

Each IEEE Computer Society transactions is headed by a volunteer editor in chief whose task is to solicit or accept manuscripts, distribute them to recognized experts for peer review, schedule them for publication, and ensure archiving the resulting product in perpetuity.

For more information on Computer Society transactions, visit www.computer.org/transactions.

IEEE *Intelligent Systems* welcomes papers on all areas of artificial intelligence, focusing on novel research that impacts applications. In 2007, *Intelligent Systems* will present a July/August special issue on intelligent educational systems and a September/October
special issue on social computing. Other issues will address topics including argumentation technology and recommender systems.

Intelligent Systems is published 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, RSS feeds, and a free downloadable trial issue.

IEEE MultiMedia magazine serves a community of scholars, developers, practitioners, and students who are interested in using multiple media types to create new experiences. Throughout 2007, the magazine will publish articles about innovative multimedia and exciting breakthroughs in the field. MultiMedia will conclude the year with an October-December issue covering recent advances in multimedia signal processing for life sciences and healthcare.

In addition to technical articles, the quarterly magazine also offers new product descriptions, book reviews, and announcements of conferences and workshops. MultiMedia features a Readers’ Remarks department that encourages feedback and participation from the multimedia community.

See www.computer.org/multimedia/ for article submission guidelines and a complete editorial calendar.

IEEE Pervasive Computing delivers the latest peer-reviewed developments in pervasive, mobile, and ubiquitous computing. With content that is accessible and useful today, it acts as a catalyst for progress in this emerging field, bringing together experts in hardware, software, physical-world interaction, human-computer integration, and systems deployment. It publishes articles on topics such as sensor technologies, wearable and handheld computers, and high-bandwidth wireless communication, focusing on how to combine such technologies into a seamless whole.

In 2007, Pervasive Computing will publish issues on pervasive computing in healthcare, building a sensor-rich world, urban computing, and security and privacy. Key material from Pervasive Computing is available on the Web through IEEE Distributed Systems Online. See www.computer.org/pervasive/ for submission guidelines and links to related content.

IEEE Design & Test of Computers magazine 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. Design & Test is published in technical cosponsorship with the IEEE Circuits and Systems Society.

Kicking off 2007, a January/February issue looks at design, integration, and test issues related to biochips. In its March/April issue, Design & Test will cover advances in functional validation through hybrid techniques, while the magazine’s May/June issue will highlight IR-drop and power supply noise effects on very deep-submicron design and test. Design & Test’s July/August issue will include a special section on computer-aided design for emerging technologies.

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

Since 1979, IEEE Annals of the History of Computing has been the primary scholarly publication for recording, analyzing, and debating the history of computing. The quarterly magazine regularly calls on computer pioneers to share firsthand accounts of significant historical moments.

The entire collection of Annals, from 1979 to the present, is now 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, and other resources.

IEEE Computer Society publications are available to members via print subscriptions and through the online Computer Society Digital Library, available at www.computer.org/publications/dlib/. Member prices for articles online range from $9 for an individual article to $119 for a full-year, all-access subscription. To subscribe, visit www.computer.org/subscribe/.

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