CALLS FOR IEEE CS PUBLICATIONS

**IEEE Software** seeks articles for a special issue on benchmarking software organization. Topics include case studies of partner-based benchmarking; cross-industry comparisons of organizational or project performance (for example, productivity and quality); lessons learned for effective benchmarking; and descriptions, evaluations, and critiques of benchmarking approaches. We will consider short news articles describing the availability of unique benchmarking resources. We are also seeking potential participants for a survey of software benchmarking products and services. Authors of news articles and survey participants should respond by 1 Feb. 2001 to guest editor David Zubrow, dz@sei.cmu.edu. Submit regular articles by 28 Feb. 2001 to guest editor David Card, card@software.org.

**IEEE Computer Graphics & Applications** seeks original research papers for a September 2001 special issue on applied perception. Guest editors Jack Tumblin and James Ferwerda seek papers that use knowledge of human perceptual abilities to develop methods for connecting the world of computers to the world of everyday human perception. Potential topics include perceptual issues in computer graphics modeling, rendering, and display; perceptual aspects of human-computer interaction; psychophysical quality metrics for rendering, modeling, and imaging applications; vision-based algorithms for image compression and enhancement; multisensory display and input technologies including haptics, smell, audio, and the like; and computer graphics applied to prosthetics and assistive technology. Send six copies of full papers by 1 Mar. 2001 to Jack Tumblin, Program of Computer Graphics, 580 Rhodes Hall, Cornell University, Ithaca, NY 14853; jet@graphics.cornell.edu.

**IEEE Transactions on Computers** seeks original manuscripts for a May 2002 special issue on asynchronous real-time distributed systems. Topics include timeliness models and paradigms, scheduling and multilevel resource management, asynchronous event handling, multidimensional application-level QoS models and techniques, QoS specification and negotiation mechanisms, failure detection and recovery, adaptive resource management, adaptive communication, reliable communication protocols, distributed agreement, synchronization and concurrency control, performance evaluation, testing and debugging, and case studies and experiences. Submissions are due 31 Mar. 2001. Guest editors are E. Douglas Jensen, Jensen@real-time.org, and Binoy Ravindran, binoy@vt.edu. For submission details, see http://www.ee.vt.edu/~tocsii/.

**IEEE Transactions on Computers** seeks original manuscripts for a summer 2002 special issue on database management and mobile computing. Topics include mobile database transaction models; data distribution, replication, caching and synchronization; recovery and fault tolerance; mobility awareness and adaptability; wireless software, service, and application infrastructures; location management and mobility management for wireless networks; mobile query languages and query processing; mobile e-commerce; and mobile objects and agents: models and languages. Submissions are due 30 June 2001. Guest editors are Wang-Chien Lee, wlee@gte.com; Sandeep Gupta, gunta@cs.colostate.edu; and Pradip Srimani, srimani@cs.clemson.edu. For submission details, see http://www.cs.clemson.edu/~srimani/tc/cfp.html.

**IEEE Intelligent Systems** seeks papers describing robot systems that represent innovative solutions to the integration problem in intelligent robotics for a special issue on semisentient robots: routes to integrated intelligence. Preference will be given to papers describing robots that actually demonstrate the integration of human-robot communication (including gestures and spoken language), real-time action, reasoning, and learning (at the symbolic level as well as at the control level). The emphasis will be more on promising work in progress rather than carefully documented and evaluated experiments. Manuscripts should not exceed 7,500 words, with up to 10 references. Send manuscripts to lsl@det.ua.pt in PDF (preferred) or PostScript format by 31 Jan. 2001. Guest editors are Luis Seabra Lopes, lsl@det.ua.pt, and Jonathan Connell, jconnell@us.ibm.com. For author guidelines, see http://www.computer.org/intelligent/author.htm.

Papers should range from 3,000 to 7,500 words, including figures, which each count as 250 words. To submit an article, send one double-spaced complete copy and a cover letter or e-mail to Angela Williams, Manuscript Assistant, IEEE Intelligent Systems, 10662 Los Vaqueros Circle, P.O. Box 3014, Los Alamitos, CA 90720-1314; phone +1 714 821 8380; fax +1 714 821 4010; awilliams@computer.org. For author guidelines, see http://computer.org/intelligent/author.htm.

The IEEE Computer Society seeks general-interest submissions for six transactions. These scholarly archival journals inform readers on the state of the art in subfields of computing, and include the following titles: **Transactions on Computers, Transactions on Knowledge & Data Engineering, Transactions on Pattern Analysis & Machine Intelligence, Transactions on Parallel & Distributed Systems, Transactions on Software Engineering, and Transactions on Visualization & Computer Graphics.** For more information and links to specific titles, see http://computer.org/author/transguide/.

OTHER CALLS

ICSM 2001, IEEE Int’l Conf. on Software Maintenance, 6-10 Nov., Florence, Italy. Tutorials due 12 Feb. to icsm2001.tutorial@unisannio.it; and industrial application presentations due 12 Mar. to icsm2001.industry@unisannio.it. Contact Paolo Nesi, nesi@dsi.unifi.it. See http://www.dsi.unifi.it/icsm2001.
Call and Calendar


Call for Articles for Computer

Computer seeks articles for a special issue on embedded system security, to appear in October 2001. Guest editors are William A. Arbaugh, University of Maryland, and Leendert Van Doorn, IBM Research.

Embedded systems range from personal digital assistants to disk controllers and from home thermostats to microwave regulators. These near-ubiquitous devices are often networked and thus present security challenges similar to those already of concern on the Internet. This special issue will consider the security and privacy implications that networked embedded systems present.

Submissions are sought on all topics relating to embedded system security including risk analysis, privacy issues, legal implications, intellectual property, software security architectures, security requirements for embedded operating systems, embedded cryptographic devices, using embedded devices to build secure systems, and secure firmware upgrades.

The submission deadline is 15 March 2001. Contact William Arbaugh at waa@cs.umd.edu.

Computer seeks articles for a special issue on engineering of computer-based systems, to appear in November 2001. Guest editors are Stephanie White, Long Island University; Harold “Bad” Lawson, Lawson Konsult AB; and Bonnie Melhart, Texas Christian University.

CBSs are composed of software, electronics and, frequently, mechanical components. They must meet functional, performance, and dependability requirements that demand tight integration of heterogeneous components, distributed processing and databases, and internal and external communication systems. CBSs are not only complex in and of themselves, but they operate in complex environments, frequently involving both humans and physical components. To design such systems, engineers must thoroughly understand complex application domain scenarios and technology, possible trade-offs in system design, the interaction between the system and the domain, and the realization of heterogeneous system elements. Interdisciplinary development is necessary, and system engineering is needed to coordinate the whole.

The goal of this special issue is to address the current state of technology in engineering computer-based systems. We are interested in papers that take a holistic approach, integrating systems engineering technology with the technology of engineering fields such as software, hardware, or codesign, and technology that is applicable across application domains. Topics of special interest include model-based engineering, integrated architecture, system composition strategies, tool composition technology, and other processes that organize and manage system complexity. We encourage case studies, especially those that report on commercial systems with a relatively short development cycle.

The submission deadline is 1 April 2001. Send an electronic file to Bonnie Melhart at b.melhart@tcu.edu.
ICDM 01, 2001 IEEE Int'l Conf. on Data Mining, 29 Nov.-2 Dec., Silicon Valley, Calif. Papers and workshop proposals due 15 June; tutorials due 30 June. Contact Xindong Wu, xindong@computer.org. See http://kais.mines.edu/~xwu/icdm/icdm-01.html.

CALENDAR

JANUARY 2001

8-10 Jan: WORDS 2001, 6th Int'l Workshop on Object-Oriented Real-Time Dependable Systems, Rome. Contact Wolfgang Schroeder-Preikschat, wosch@cs.uni-magdeburg.de. See http://www.dis.uniroma1.it/~words.

8-12 Jan: SAINT 2001, Symp. on Applications & the Internet, San Diego, Calif. Contact Mike Liu, Ohio State Univ., ml.liu@computer.org. See http://www.computer.org/tab/TCI/SAINT/.


31 Jan-2 Feb: ICOIN-15, 15th Int'l Conf. on Information Networking, Beppu City, Japan. Contact Yoshitaka Shibata, shibata@iwate-pu.ac.jp. See http://www.takilab.k.dendai.ac.jp/conf/icoin15/.

FEBRUARY 2001


MARCH 2001

4-7 Mar: BiTS, Burn-in & Test Socket Workshop, Mesa, Ariz. Contact Frederick Taber, taber@us.ibm.com. See http://www.bitsworkshop.org.


26-28 Mar: IWSW, 8th Int'l Test Synthesis Workshop, Santa Barbara, Calif. Contact Elizabeth Rudnick, Univ. of Illinois, 1308 W. Main St., Urbana, IL 61801; liz@uiuc.edu. See http://yellowstone.ece.uchicago.edu/~itsw/ITSW.html.


APRIL 2001


2-4 Apr: ITCC, Int'l Conf. on Information Technology: Coding & Computing, Las Vegas, Nev. Contact Shahram Latifi, latifi@ee.unlv.edu.


19-20 Apr: Cool Chips IV, Tokyo. Contact Tadao Nakamura, nakamura@archi.is.tohoku.ac.jp. See http://www.coolchips.org/.


25-27 Apr: CODES, 9th Int’l Symp. on Hardware/Software Codesign, Copenhagen, Denmark. Contact Jan Madsen, jan@it.dtu.dk. See http://www.nd.edu/~codes.

29 Apr: DBT 2001, IEEE Int’l Workshop on Defect-Based Testing, Marina del Rey, Calif. Contact Sankaran Menon, sankaran.menon@intel.org.


MAY 2001


