CALLS FOR IEEE CS PUBLICATIONS

IEEE Software magazine plans a July/August 2006 special issue on software verification and validation techniques. Software seeks papers on topics that include the automation of software testing, experiences in testing process improvement, testing metrics, and best practices for testing in specific domains.

Software focuses on providing its readers with practical and proven solutions to real-life challenges. Complete author instructions are available at www.computer.org/software/author.htm.

Submissions are due by 1 November. View the complete call for papers at www.computer.org/software/edcal.htm.

OTHER CALLS


Call for Articles for Computer

Computer seeks articles for a special issue to appear in April 2006 on the software engineering and application of software-based medical devices and device systems. The guest editor is Rick Schrenker, Department of Biomedical Engineering, Massachusetts General Hospital; http://biomed.partners.org.

The Institute of Medicine’s 1999 report, To Err Is Human, estimated that as many as 98,000 Americans were dying annually as a result of medical errors. The section titled “Why Do Accidents Happen?” states “People … become accustomed to design defects and learn to work around them, so often they are not recognized” and “Accidents are more likely to happen in certain types of systems. When they do occur, they represent failures in the way systems are designed. The primary objective of systems design ought to be to make it difficult for accidents and errors to occur and minimize damage if they do occur.”

Given the hundreds to thousands of technically and clinically heterogeneous medical equipment models (and their attendant software) used in large medical facilities, the increasing complexity facing medical device users and the clinical engineering community is almost overwhelming. This special issue looks at the challenges facing the medical industry as a whole, and the clinical engineering community in particular, in realizing the promise of modern medical technology. Topics of interest include

- the application of software engineering in the development of systems that span the spectrum of care—for example, home, community, community hospital, academic medical center, and regional health care systems;
- the application of software engineering in the development of systems in high-intensity care-delivery settings—for example, intensive care units or operating rooms, where various clinically and technically heterogeneous devices and systems can be applied to provide patient care, often in concert; and
- lifecycle maintenance, management, and safety assurance of software-based medical devices and systems, duly considering both the care environment and the technological sophistication of users and potential interactions with coresident devices.

Computer seeks articles treating all aspects of the application of software engineering to the development and management of software-based medical devices used in the delivery of direct patient care, including human factors, safety, and business issues.

The submission deadline is 1 December 2005. Author guidelines and submission instructions are available at www.computer.org/portal/pages/computer/mc/author.html.

Send inquiries to the guest editor at raschrenker@partners.org.

Submission Instructions

The Call and Calendar section lists conferences, symposia, and workshops that the IEEE Computer Society sponsors or cooperates in presenting. Complete instructions for submitting conference or call listings are available at www.computer.org/conferences/submission.htm.

A more complete listing of upcoming computer-related conferences is available at www.computer.org/conferences/.

CALENDAR

NOVEMBER 2005


10-11 Nov: SDD 2005, 2nd IEEE Int’l Workshop on Silicon Debug & Diagnosis (with ITC), Austin, Texas. http://evia.ucsd.edu/conferences/sdd/05/


14-16 Nov: ECOWS 2005, 3rd European Conf. on Web Services, Växjö, Sweden. www.wscinfo.ecows2005/1


26-30 Nov: ICDM 2005, 5th IEEE Int’l Conf. on Data Mining, New Orleans (subject to change). www.cacs.louisiana.edu/~icdm05/


DECEMBER 2005


18-21 Dec: ATS 2005, IEEE 14th Asian Test Symp., Kolkata, India. www.iitkgp.ac.in/ats05/


JANUARY 2006


8-11 Jan: Key West 2006, IEEE Key West Computer Elements Workshop, Key West, Fla. www.unf.edu/ccce/ieee/IEEE-2006-KeyWest-Call.pdf


FEBRUARY 2006

11-15 Feb: HPCA-12, 12th IEEE Int'l Symp. on High-Performance Computer Architecture, Austin, Texas. www.cse.psu.edu/conf/hpca/

MARCH 2006

4-5 Mar: SLIP 2006, Int'l Workshop on System-Level Interconnect Prediction (with DATE), Munich. www.sliponline.org/


APRIL 2006

3-7 Apr: ICDE 2006, 22nd IEEE Int'l Conf. on Data Eng., Atlanta. http://icde06.cc.gatech.edu/


20-26 Apr: CSEET 2006, 19th Conf. on Software Eng. Education & Training, Oahu, Hawaii. Contact Daniel Port, dport@hawaii.edu.


Call for Articles for Computer

Computer seeks articles for a special issue on public computing in city contexts, to appear in August 2006. Guest editors are Michele Chang from Intel and Irina Shklovski from Carnegie Mellon University.

In recent years, forces of technology, culture, and society have converged to reshape urban life. The urban experience has quickly emerged as a major focus for research on issues of mobility, location-based services, and pervasive computing. A city’s complexities, embodied in its social, historical, and technological infrastructures, make it a viable alternative to the controlled environment of the lab.

This special issue will be devoted to bringing members of the human-computer interaction community together with researchers and practitioners from the fields of urban planning, architecture, and design to examine public interfaces and their effects on the urban environment. Public interfaces are systems that foster public dialog, facilitate the exchange of information and services, or encourage interaction between public entities and city inhabitants. Computer encourages submissions reporting systematic empirical studies or critical analyses of interdisciplinary research as well as descriptions of technology development.

Topics of particular interest include computing as a shared resource, surveillance and personal boundaries in public spaces, access as a means of control and discrimination, and supporting individuals in the production of knowledge.

The deadline for papers is 15 February 2006. Author guidelines and submission instructions are available at www.computer.org/portal/pages/computer/mc/author.html.

Send inquiries to the guest editors at michele.f.chang@intel.com or irinas@cs.cmu.edu.