SAC 2008
23rd ACM Symposium on Applied Computing
Fortaleza, Brazil, March 16-20 2008

http://www.acm.org/conferences/sac/sac2008/

Important dates

Sept. 8, 2007: Paper Submission
Oct. 16, 2007: Author Notification
Oct. 30, 2007: Camera-Ready

Track Chairs

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Cosimo Antonio Prete
University of Pisa – Italy

Program Committee

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Special Track
Embedded Systems: Applications, Solutions, and Techniques

http://www2.ing.unipi.it/sac08/

CALL FOR PAPERS

One of the most lively and challenging research areas in computer science today is represented by the embedded systems modeling/design/development. The growing need of system resources in embedded devices often leads to the adoption of application-specific solutions, that must be pursued taking also into account a number of tight constrains on performance, memory size, cost, etc. Moreover, solutions can be proposed at different abstraction levels, shaping system features by operating on architecture, middleware, compiler and software architecture as well. Issues coming from the distributed and/or real-time nature of some embedded applications contribute to make the overall scenario more and more complex. Tackling new problems emerging in this setting, calls for a joint effort by academia and industry.

The focus of this conference track is on the application of both novel and well-known techniques to the embedded systems design and development. Particular attention is paid to solutions that require expertise on different topics (e. g. computer architecture, OS and RTOS, compilers, software engineering, simulation). In this setting, researchers and practitioners from academia and industry will get a chance to compare experimentations, propose new ideas, and discuss future directions in fields related to the development of embedded systems.

Topics of interest

Methodologies and tools for design-space exploration - Simulation techniques for embedded systems - System-level design - Power-aware design techniques and computing - Testing, debugging, profiling and performance analysis of embedded systems - Networked sensor devices and systems - SoC-based embedded systems and applications - Middleware solutions for embedded systems - Data exchange among embedded systems - Software architectures and SOA for embedded systems - Embedded systems exploitation within Information Systems - Multimedia management in embedded systems - Security and dependability support within embedded systems - Embedded systems contribution in meeting security goals- OS & RTOS for embedded systems - Hardware/software support for real-time applications - Compilation strategies for performance enhancement vs. footprint control - Code transformation and program parallelization for embedded systems - Java embedded computing - Special-purpose appliances and applications - Case studies

Submission Guidelines

Original papers addressing the listed topics of interest will be considered. Each submitted paper will be fully refereed and undergo a blind review process.

The accepted papers in all categories will be published in the ACM SAC 2008 proceedings.

Details about paper submission will be available on both the conference and the track websites.

Questions can be directed to the Track Chairs. Additional details will be available at the track home page at http://www2.ing.unipi.it/sac08 and at the conference home page at http://www.acm.org/conferences/sac/sac2008/ .