CALL FOR PAPERS

Submission Deadline: October 7, 2011 (extended)

The ARCS series of conferences has over 30 years of tradition reporting top notch results in computer architecture and operating systems research. The focus of the 2012 conference will be on platforms for embedded computer systems. Like the previous conferences in this series, it continues to be an important forum for computer architecture research.

In 2012 ARCS will be organized by the Institute for Integrated Systems of TU München and will be hosted by the Institute of Advanced Studies (IAS), Garching campus near Munich.

The proceedings of ARCS 2012 will be published in the Springer Lecture Notes on Computer Science (LNCS) series (pending). After the conference, authors of selected papers will be invited to submit an extended version of their contribution for publication in a special issue of the Journal of Systems Architecture. Also, a best paper and best presentation award will be presented at the conference.

Paper submission: Authors are invited to submit original, unpublished research papers on one of the following topics:

- Architectures and design methods/tools for robust, failure tolerant, real time embedded systems.
- Cyber physical systems and distributed computing architectures.
- Multi-/manycore architectures, memory subsystems, and communication architectures for reliable systems.
- Tool support for manycore systems including but not limited to programming models, runtime systems, middleware, and verification.
- Generic and application specific accelerators for multicore architectures.
- Adaptive system architectures such as reconfigurable systems in hardware and software.
- Organic and Autonomic Computing including both theoretical and practical results on self-organization, self-configuration, self-optimization, self-healing, and self-protection techniques.
- Operating Systems including but not limited to scheduling, memory management, power management, and RTOS.
- Energy-aware computing, power efficient computing architectures.
- System aspects of ubiquitous and pervasive computing such as sensor nodes, novel input/output devices, novel computing platforms, architecture modeling, and middleware.
- Applications of manycore embedded systems.

Submissions should be done through the link that is provided at the conference website http://www.arcs2012.tum.de. Papers should be submitted in pdf or postscript format.
They should be formatted according to Springer LNCS style (see: http://www.springer.de/comp/lncs/authors.html) and not exceed 12 pages.

**Workshop and Tutorial Proposals:** Proposals for workshops and tutorials within the technical scope of the conference are solicited. Submissions should be done through email directly to the corresponding chairs:
Gero Mühl, University of Rostock, Germany, (gero.muehl@uni-rostock.de)
Jan Richling, TU Berlin, Germany, (richling@cs.tu-berlin.de)

**Important Dates:**
- Paper submission deadline: October 7, 2011
- Workshop and tutorial proposals: October 15, 2011
- Notification of acceptance: November 20, 2011
- Camera ready papers: December 15, 2011

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