

ARCS 2015

THIS YEAR'S FOCUS: Reconciling Parallelism and Predictability in Mixed-Critical Systems

CALL FOR PAPERS

The ARCS series of conferences has over 30 years of tradition reporting high quality results in computer architecture and operating systems research. The focus of the 2015 conference will be on **Reconciling Parallelism and Predictability in Mixed-Critical Systems**. Like the previous conferences in this series, it continues to be an important forum for computer architecture research.

The proceedings of ARCS 2015 will be published in the Springer Lecture Notes on Computer Science (LNCS) series. 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 provided at the conference.

Authors are invited to submit original, unpublished research papers on one of the following topics:

- Multi-/many-core architectures, memory systems, and interconnection networks.
- Models and tools for multi-/many-core systems including but not limited to programming models, runtime systems, middleware, and verification.
- Design, methods, and hardware and software architectures for mixed-critical systems.
- Architectures and design methods/tools for robust, fault-tolerant, real-time embedded systems.
- Generic and application-specific accelerators in heterogeneous architectures.
- Cyber-physical systems and distributed computing 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-awareness and green computing.
- System aspects of ubiquitous and pervasive computing such as sensor nodes, novel input/output devices, novel computing platforms, architecture modeling, and middleware.
- Grid and cloud computing.

Submissions

Regular papers should be submitted via the link provided on the conference website, formatted according to the Springer LNCS style and not exceeding 12 pages.

Workshop and Tutorial proposals within the technical scope of the conference are solicited. Those should be submitted by email directly to the corresponding chair (address at the website).



Important Dates

Paper submission deadline (extended):	October 17, 2014
Workshop/tutorial proposals:	November 3, 2014
Notification of acceptance:	December 1, 2014
Camera-ready papers:	December 15, 2014

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