

ARCS 2017

30THGI/ITG INTERNATIONAL CONFERENCE ON ARCHITECTURE OF COMPUTING SYSTEMS THIS YEAR'S FOCUS: HETEROGENEOUS NODE ARCHITECTURES WITH DEEP MEMORY SYSTEMS

Vienna, Austria
April 03 - 06, 2017
<http://arcs2017.itec.kit.edu/>

CALL FOR PAPERS

Submission Deadline Extension: November 3, 2016

The ARCS conferences series has over 30 years of tradition reporting leading edge research in computer architecture and operating systems. The focus of the 2017 conference will be on Heterogeneous Node Architectures with Deep Memory Systems.

ARCS 2017 will be organized by the Complang Group at the Vienna University of Technology and the CAPP group at the Karlsruhe Institute of Technology (KIT).

The proceedings of ARCS 2017 will be published in the Springer Lecture Notes on Computer Science (LNCS) series. After the conference, it is planned that 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. Further, 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Paper submission: Authors are invited to submit original, unpublished research papers on one or more of the following topics:

- Multi-/many-core architectures, memory systems, and interconnect networks.
- Programming models, runtime systems, and middleware support for many-core and/or heterogeneous computing platforms.
- Tool support for performance optimization, debugging, and verification.
- Generic and application-specific architectures such as reconfigurable systems in hardware and software.
- Robust and fault-tolerant systems structures.
- Architectures and design methods/tools for real-time embedded systems.
- Cyber-physical systems and distributed computing architectures.
- 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 real-time OS (RTOS) concepts.
- Energy and power-aware computing, including green computing topics.
- System aspects of ubiquitous and pervasive computing such as sensor nodes, novel input/output devices, novel computing platforms, architecture modeling, and middleware.
- Architectures for robotics and automation systems.
- Applications of embedded and cyber-physical systems.
- High-performance and large scale parallel computing.
- Approximate computing.
- Post-Moore Architectures, including but not limited to quantum and neuromorphic computing.

Submissions should be done through the link that is provided on the conference website <https://easychair.org/conferences/?conf=arcs2017>. Papers must be submitted in PDF format.

They should be formatted according to Springer LNCS style (see: <http://www.springer.de/comp/lncs/authors.html>) and must not exceed 12 pages, including references and figures.

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 chair: Carsten Trinitis, (Carsten.Trinitis@tum.de)

Important Dates:

Paper submission deadline:	NEW: November 3, 2016
Workshop and tutorial proposals:	November 30, 2016
Notification of acceptance:	December 21, 2016
Camera-ready papers:	January 11, 2017

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