

ARCS 2020

**33rd GI/ITG INTERNATIONAL CONFERENCE ON ARCHITECTURE OF COMPUTING SYSTEMS
THIS YEAR'S FOCUS: SELF-ORGANIZATION AND SELF-ADAPTION IN HIGH-PERFORMANCE
COMPUTING**

Aachen, Germany
Mai 25 - 28, 2020
<http://arcs2020.itec.kit.edu/>

CALL FOR PAPERS

The ARCS conferences series has over 30 years of tradition reporting leading edge research in computer architecture and operating systems. The focus of the 2020 conference will be on concepts and tools for incorporating self-adaptation and self-organisation mechanisms in high-performance computing systems. This includes upcoming approaches for runtime modification at various abstraction levels, ranging from hardware changes to goal changes and their impact on architectures, technologies, and languages.

The proceedings of ARCS 2020 will be published in the Springer Lecture Notes on Computer Science (LNCS) series. 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Paper submission: Authors are invited to submit original, unpublished research papers on one or more of the following topics:

- Hardware Architectures
 - System-on-chip
 - Distributed systems
 - High performance systems
 - Heterogeneous multi- and many-core architectures
 - Architectures for real-time and mixed-criticality systems
 - Coarse- and fine-grained reconfigurable architectures
 - Flexible I/O support
 - Advanced computing architectures
 - New Memory Technologies

- Programming Models and Runtime Environments
 - Programming models for many-core and/or heterogeneous computing platforms
 - Operating systems, hypervisors and middleware for homogeneous and heterogeneous multi-/many-core computing platforms
 - System management including but not limited to scheduling, memory management, power/thermal management, and RTOS

- Cross-sectional Topics
 - Organic Computing
 - Adaptive systems (energy aware, self-x technologies)
 - Pervasive systems
 - Approximate Computing

- Autonomous systems
- Support for safety and security

Submission guidelines: Submissions should be done through the link that is provided on the conference website <https://easychair.org/conferences/?conf=arcs2020>. Papers must be submitted in PDF format.

They should be formatted according to Springer LNCS style (see: <https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>) 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:	January 17, 2020
Workshop and tutorial proposals:	TBA
Notification of acceptance:	February 21, 2020
Camera-ready papers:	March 23, 2020

Organizing Committee:

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