

ARCS 2018 -- Call for papers, workshops, and tutorials

Submitted by Anonymous on Thu, 10/05/2017 - 1:21pm

CALL FOR PAPERS, WORKSHOPS, & TUTORIALS

[31st International Conference on Architecture of Computing Systems \(ARC 2018\)](#)

April 09 -12, 2018 | Braunschweig, Germany at the Technical University of Braunschweig | <http://arcs2018.itec.kit.edu/>

Scope

The ARCS conferences series has over 30 years of tradition reporting leading edge research in computer architecture and operating systems. The focus of the 2018 conference will be on architectures for robotics, autonomous vehicles, and automation systems.

ARCS 2018 will be organized by the Chair for Chip Design for Embedded Computing (C3E) at TU Braunschweig.

The proceedings of ARCS 2018 will be published in the Springer Lecture Notes on Computer Science (LNCS) series. After the conference, it is planned that the 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.

Call for Papers:

Authors are invited to submit original, unpublished research papers on one or more of the following topics:

Architectures

- Multi/many-core architectures, memory systems, and interconnection networks
- Generic and application-specific architectures such as reconfigurable systems in hardware and software
- Cyber-physical systems and distributed computing architectures
- Robust and fault-tolerant systems structures

- Architectures for robotics, autonomous vehicles, and automation systems
- Post-Moore Architectures, including but not limited to quantum and neuromorphic computing

Programming models and Runtime environments

- Programming models, runtime systems, and middleware support for many-core and/or heterogeneous computing platforms
- Operating Systems including but not limited to scheduling, memory management, power management, and RTOS

Tool environments

- Design methods and tools for real-time embedded systems
- Tool support for performance optimization, debugging, and verification

Cross-sectional topics

- Organic and Autonomic Computing including both theoretical and practical results on self-organization, self-configuration, self-optimization, self-healing, and self-protection techniques
- 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
- Applications of embedded and cyber-physical systems
- Autonomous and reasoning platforms
- High-performance computing
- Approximate computing

Submission guidelines

All submitted manuscripts must conform to the Springer LNCS formatting requirements, see:

<https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>

Manuscripts must be submitted online via EasyChair using the following link: <https://easychair.org/account/signin.cgi?key=60023168.tewASqzBcHAYsYhl>

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

Email: carsten.trinitis@tum.de

Important Dates

- Paper submission deadline: October 27, 2017
- Extended submission deadline: November 03, 2017
- Workshop and tutorial proposals: December 1, 2017
- Notification of acceptance: December 15, 2017
- Camera-ready papers: January 12, 2018
- Conference: April 09-12, 2018
- Workshops: April 09/10, 2018

Conference Location

The conference will be held at the Technical University of Braunschweig, Braunschweig, Germany, from April 09, 2018 through April 12, 2018.

TU Braunschweig
Haus der Wissenschaft
Pockelsstrasse 11
38106 Braunschweig, Germany

[? CfP: 6th ALCHEMY Track on Many-core Programming Issues \(Part of ICCS 2018\)](#)
[CPS Week Call for workshops, tutorials, and competitions - deadline: 3 Nov 17 ?](#)



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