

Call for Papers

Track 3 - Real-Time (and Networked) Embedded Systems

Track co-chairs

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+ **FOCUS.** Industry is increasingly permeated with embedded systems involved in complex functionality, distributed intelligence and adaptive behaviour. Some of these features are deployed locally exploiting new powerful computing architectures while other are offloaded to peripheral or remote computing centres through ubiquitous connectivity and global networks. This track focuses on the challenges that arise from designing these systems, particularly given real-time, power, reliability, available resources and other constraints.

+ TOPICS

- ♦ Application and Platform models:** Real-Time Computing; Real-Time and Embedded Operating Systems and Communications; Networked and Distributed Embedded Systems; Multi/Many-Core Embedded Systems; Wireless Sensor (and Actuator) Networks; Cyber Physical Systems; Industrial Internet-of-Things; Integration with Cloud/Fog/Edge Computing.
- ♦ Design, Analysis and Deployment methods:** Design Tools, Flows and Methodologies; Hardware/Software Co-Design; Components, Platforms and Re-Use; Synthesis and Code-Generation; Formal Methods; Verification and Validation; Data Integration and Fusion; Quality of Service; Timing and Schedulability Analysis.
- ♦ Architectures and System-wide issues:** Distributed and System-on-Chip Architectures; Reconfigurable Real-Time Systems; Context-Aware and Self-Organizing Systems; Mixed-Criticality Real-Time Systems; Reliable and Fault-Tolerant Real-Time Systems; Energy and Performance Optimization.

+ **AIM.** The aim of the conference is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the newly emerging areas of technology, as well as actual and potential applications to industrial and factory automation.

+ **CONFERENCE FORMAT.** The conference will comprise multitrack sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations; work-in-progress (WIP) sessions; panel discussions on the state-of-the-art and emerging trends, involving leading experts from industry and academia; and public discussion sessions moderated by leading experts in the field of industrial automation systems.

+ AUTHOR'S SCHEDULE (2019)

♦ Regular and special sessions papers

Submission deadline **April 1** April 22
 Acceptance notification **May 6** May 20
 Deadline for final manuscripts **June 17** June 27

♦ Work-in-progress/ Industry practice papers

Submission deadline **May 13** June 3
 Acceptance notification **June 10** June 24
 Deadline for final manuscripts **June 17** July 1

♦ Track Programme Committee

- ♦** S. Altmeyer, *University of Amsterdam*
- ♦** E. Armengaud, *AVL List GmbH*
- ♦** M. Ashjaei, *Mälardalen University*
- ♦** K. Bletsas, *Polytechnic Institute of Porto*
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- ♦** A. Mifdaoui, *University of Toulouse*
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- ♦** L.M. Pinho, *Polytechnic Institute of Porto*
- ♦** F. Praus, *UAS Technikum Wien*
- ♦** I. Puaut, *IRISA*
- ♦** D. Quaglia, *Università di Verona*
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- ♦** F. Singhoff, *University of Brest*
- ♦** M. Sjodin, *Mälardalen University*
- ♦** P. Souto, *University of Porto*
- ♦** A. Steininger, *Technical University Wien*
- ♦** M. Wehrmeister, *Federal University of Parana*