

Call for Papers

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

Track chairs

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- ❖ **FOCUS.** Industry is increasingly permeated with embedded systems involved in complex functionality, distributed intelligence and adaptive behavior. Some of these features are deployed locally exploiting new powerful computing architectures while other are offloaded to peripheral or remote computing centers 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.

❖ TOPI CS

- ❖ **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; Time-sensitive networks
- ❖ **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; Software-Defined Networks

- ❖ **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 multi-track 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, as well as work-in-progress (WiP) and industry practice sessions.

❖ AUTHOR'S SCHEDULE (2022)

❖ Regular and special sessions papers

Submission deadline April 1
Acceptance notification May 6
Deadline for final manuscripts June 17

❖ Work-in-progress/Industry practice papers

Submission deadline May 13
Acceptance notification June 10
Deadline for final manuscripts June 17

Track Program Committee

- ❖ Sebastian Altmeyer, *University of Augsburg, Germany*
- ❖ Amir Aminifar, *Lund University, Sweden*
- ❖ Konstantinos Bletsas, *Polytechnic Institute of Porto, Portugal*
- ❖ Reinder J. Bril, *TU Eindhoven, The Netherlands*
- ❖ Antonio Casimiro, *University of Lisbon, Portugal*
- ❖ Roberto Cavicchioli, *University of Modena, Italy*
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- ❖ Patrick Denzler, *TU Wien, Austria*
- ❖ Marco Di Natale, *Scuola Superiore Sant'Anna di Pisa, Italy*
- ❖ Hans Doran, *UAS Winterthur, Switzerland*
- ❖ Petru Eles, *University of Linköping, Sweden*
- ❖ Wilfried Elmenreich, *Alpen-Adria-Universität, Austria*
- ❖ Luis Ferreira, *ISEP Porto, Portugal*
- ❖ Javier Gutierrez, *Universidad de Cantabria, Spain*
- ❖ Arne Hamann, *Robert Bosch GmbH, Germany*
- ❖ Martin Horauer, *UAS Technikum Wien, Austria*
- ❖ Mathieu Jan, *CEA, France*
- ❖ Marcio Kreutz, *Federal University of Rio Grande do Norte, Brazil*
- ❖ Luca Leonardi, *University of Catania, Italy*
- ❖ Lucia Lo Bello, *University of Catania, Italy*
- ❖ Julio Medina, *Universidad de Cantabria, Spain*
- ❖ Ahlem Mifdaoui, *ISAE, Toulouse, France*
- ❖ Nicolas Navet, *University of Luxembourg, Luxembourg*
- ❖ Luis Oliveira, *University of Pittsburgh, USA*
- ❖ Roberto Passerone, *University of Trento, Italy*
- ❖ Claudio Passerone, *University of Torino, Italy*
- ❖ Paulo Pedreiras, *Aveiro University, Portugal*
- ❖ Luis Miguel Pinho, *Polytechnic Institute of Porto, Portugal*
- ❖ Paulo Portugal, *University of Porto, Portugal*
- ❖ Davide Quaglia, *Università di Verona, Italy*
- ❖ Jean Luc Scharbarg, *Université de Toulouse - IRIT - INPT/ENSEEIH, France*
- ❖ Lucia Seno, *National Research Council of Italy (CNR), Italy*
- ❖ Ramon Serna Oliver, *TTTech Computertechnik AG, Austria*
- ❖ Frank Singhoff, *University of Brest, France*
- ❖ Mikael Sjödin, *Mälardalen University, Sweden*
- ❖ Pedro Souto, *University of Porto, Portugal*
- ❖ Marco Wehrmeister, *Federal University of Technology - Parana, Brazil*
- ❖ Patrick Yomsi, *ISEP, Porto, Portugal*