ETFA 2025 Porto
Portugal 9-12 September

30th IEEE International Conference on Emerging Technologies and Factory Automation

Call for Papers - Track 3
Real-Time Systems and Applications

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 peripheric 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.

❖ **TOPICS**
- ❖ Real-time analysis and performance modelling
- ❖ Analysis and empirical evaluations
- ❖ WCET analysis
- ❖ Worst-case performance analysis
- ❖ Multi/many-core/SoC embedded systems
- ❖ Adaptive real-time systems
- ❖ Edge and cloud architectures and applications
- ❖ Dependable systems including safety and criticality
- ❖ Security issues in embedded systems design
- ❖ Privacy-enhanced systems
- ❖ QoS for embedded systems
- ❖ Wireless sensor (and actuator) networks
- ❖ Industrial IoT systems
- ❖ Wired industrial communication systems (PROFINET, TSN, EtherCAT)
- ❖ Software defined networks and systems
- ❖ Software development for embedded systems
- ❖ Design tools and methodologies for embedded systems
- ❖ Verification and validation techniques
- ❖ Formal modelling and methods
- ❖ (Self)-reconfigurable real-time systems
- ❖ Mixed-criticality real-time systems
- ❖ Reliable and fault tolerant real-time systems
- ❖ Energy and performance optimization
- ❖ Hardware-software integration and co-design
- ❖ Industrial case studies of real-time systems
- ❖ System and deployment experiences

Track Program Committee
- ❖ Andrea Bastoni, Technical University of Munich, Germany
- ❖ Claudio Passerone, University of Torino, Italy
- ❖ Daniel Casini, Scuola Superiore Sant'Anna, Italy
- ❖ Emmanuel Grolleau, ISAE-ENSMA, France
- ❖ Flávia M. S. Nascimento, Instituto Federal da Bahia
- ❖ Francesco Restuccia, University of California San Diego, USA
- ❖ Francisco J. Cazorla, Barcelona Supercomputing Center, Spain
- ❖ Guillermo Rodriguez-Navas, Nokia Lab, Israel
- ❖ Hans Doran, UAS Winterthur, Switzerland
- ❖ Javier Gutierrez, Universidad de Cantabria, Spain
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- ❖ Lucia Lo Bello, University of Catania, Italy
- ❖ Marc Boyer, ONERA, France
- ❖ Marine Sauze-Kadar, CEA, France
- ❖ Martin Horauer, UAS Technikum Wien, Austria
- ❖ Mathieu Jan, CEA, France
- ❖ Matthias Becker, KTH Royal Institute of Technology, Sweden
- ❖ Mohamed Hassan, McMaster University, Canada
- ❖ Mohammad Ashjaei, Mälardalen University, Sweden
- ❖ Nicolas Navet, University of Luxembourg, Luxembourg
- ❖ Paulo Portugal, Universidade do Porto, Portugal
- ❖ Ramon Serna Oliver, TTTech Auto, Austria
- ❖ Stefan Wilderman, Friedrich-Alexander-Universität, Germany
- ❖ Thomas Carle, Université Toulouse III – IRIT, France

❖ **AIM.** The aim of the conference is to bring together the international community to present the latest research results, share new ideas and engineering breakthroughs, and discuss state-of-the-art challenges and future directions in technology and innovation in the broad domain of Automation with a focus on 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 (2025)**

❖Regular and special sessions papers
- Submission deadline .... April 18
- Acceptance notification .... May 23
- Deadline for final manuscripts .... July 4

❖Work-in-progress/Industry practice papers
- Submission deadline .... May 30
- Acceptance notification .... June 20
- Deadline for final manuscripts .... July 4

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