ETFA

25TH INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES AND FACTORY AUTOMATION

2020 VIENNA, AUSTRIA
SEPTEMBER 08TH–11TH 2020

Call for Papers
Track 3 - Real-Time and Networked Embedded Systems
Track co-chairs

Luis Almeida[§], Manuel Barranco[◆]

[§] Universidade do Porto, Portugal, lda@fe.up.pt
[◆] Universitat de les Illes Balears, Spain, manuel.barranco@uib.es

❖ **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 peripheric 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.

Track Programme Committee

- ❖ Sebastian Altmeyer *University of Augsburg*
- ❖ Akramul Azim *University of Ontario Institute of Technology*
- ❖ Moris Behnam *Mälardalen University*
- ❖ Konstantinos Bletsas *Polytechnic Institute of Porto*
- ❖ Reinder J. Bril *TU/e Eindhoven University of Technology*
- ❖ Antonio Casimiro *University of Lisbon*
- ❖ Jian-Jia Chen *Technische Universität Dortmund*
- ❖ Liliana Cuco-Grosjean *INRIA*
- ❖ Marco di Natale *Scuola Superiore Sant'Anna*
- ❖ Petru Eles *University of Linkoping*
- ❖ Marcelo Götz *Federal University of Rio Grande do Sul*
- ❖ Martin Horauer *UAS Technikum Wien*
- ❖ Marcio Kreutz *Federal University of Rio Grande do Norte*
- ❖ Istvan Lakatos *Széchenyi István University Gyoer*
- ❖ Julio Medina *Universidad de Cantabria*
- ❖ Saad Mubeen *Mälardalen University*
- ❖ Ricardo Marau *University of Aveiro*
- ❖ Nicolas Navet *University of Luxembourg*
- ❖ Thomas Nolte *Malardalen University*
- ❖ Luis Oliveira *University of Pittsburgh*
- ❖ Roberto Passerone *University of Trento*
- ❖ Claudio Passerone *University of Torino*
- ❖ Francisco Pozo *ABB Power Grids AB*
- ❖ Luca Santinelli *Airbus*
- ❖ Jean Luc Scharbarg *Université de Toulouse - IRIT - INPT/ENSEEIHT*
- ❖ Frank Singhoff *University of Brest*
- ❖ Pedro Souto *University of Porto*
- ❖ Andreas Steininger *Technical University of Wien*
- ❖ Marco Wehrmeister *Federal University of Technology - Parana*

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

❖ **AUTHOR'S SCHEDULE (2020)**

❖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