ETFA 2018
Call for Papers

Emerging Technologies & Factory Automation

23rd IEEE International Conference
September 4-7, 2018, Torino, Italy

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Call for Papers

Track 3 - Real-Time and (Networked) Embedded Systems [RTNES]

Track co-chairs

Martin Horauer, UAS Technikum Wien, Austria, horauer@technikum-wien.at

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Focus: Embedded systems are increasingly used to realize complex functionality, distributed intelligence and adaptive behavior. New functions can be deployed taking advantage of ubiquitous connectivity and networks. The design of these systems must cope with the need to manage functional complexity together with real-time, power and reliability constraints. **This year a special attention will be given to papers that target RTNES issues for Industrial Internet of Things IIoT and cloud computing domains**

Topics: (1) **Theory and technology in RTNES**: Real-Time Computing, Operating Systems and Communications; Networked Embedded Systems technology; Parallel and Distributed Embedded Systems; Multi/Many-Core Embedded Systems; Timing and Schedulability Analysis; Wireless Sensor Networks; Cyber Physical Systems.

(2) **Design and Methods in RTNES**: Design and Implementation; Design Methodologies and Tools; Components and Platforms; Models of Computation and Formal Methods; Hardware/Software Co- Design; Verification and Validation Methods.

(3) **Architectures in RTNES**: Distributed and System-on-Chip Architectures including Communication and NoC Architecture Designs and Protocols; Static and Dynamic Reconfigurable RT Systems; Context-Aware Applications and Self-Adaptive Architectures.

(4) **Algorithms and Control in RTNES**: Energy Management; Data Integration and Fusion; Communication Modes; Quality of Service Control; Compensation Mechanisms for Aging and Temperature; Fault-Tolerant Systems.

(5) **Case Studies in RTNES**: Industrial Automation, Automotive, Avionics, Communications, e-Health and Building Automation Systems.

Aim: The ETFA conference brings together experts from industry and academia to disseminate novel ideas and emerging trends, research results and practical achievements in the area of industrial and factory automation. The ultimate goal is fostering the development and adoption of scientific methods, models, and tools for the efficient design and operation of industrial and factory automation systems.

Submission of Papers: The working language of the conference is English. Two types of submissions are solicited. Long Papers – limited to 8 double column pages in a font no smaller than 10-points. Work-in-Progress– limited to 4 double column pages in a font no smaller than 10-points. Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site http://ieee-etfa2018.com/.

Best Paper Award: Best paper awards in Factory Automation and Emerging Technologies will be presented at the conference banquet dinner.

Further Information: Conference website: http://ieee-etfa2018.com/. ETFA2018 Conference Secretariat: etfa2018@ieiit.cnr.it

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Paper Acceptance: Each accepted paper must be presented at the conference by one of the authors; otherwise the ETFA2018 Organizing Committee reserves the right to exclude a paper from distribution after the conference at IEEE Xplore. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees must pay the conference registration fee and their travel expenses.

Author's Schedule (NEW!!!):

Regular and special sessions papers		***Work-in-progress papers***	
Submission deadline:	April 27, 2018	*Submission deadline:*	June 11, 2018
Acceptance notification:	June 1, 2018	*Acceptance notification:*	June 25, 2018
Deadline for final manuscripts:	July 6, 2018	*Deadline for final manuscripts:*	July 6, 2018

http://ieee-etfa2018.com/