

ETFA 2018
Call for Papers



Emerging Technologies & Factory Automation

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

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Track 1 - Information Technology in Automation

Track co-chairs

Alexander Fay, Helmut Schmidt University, Germany, alexander.fay@hsu-hh.de

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Focus: Track on Information Technology in Automation is focused on the development, adoption and application of information technology for automation systems.

Topics: IT Modeling Techniques (e.g., Object-Orientation, Components, Agents, Services) for Automation Systems. Model Driven Development and Model Based Engineering in Automation and Mechatronic Systems (e.g., UML, SysML). Data Modeling (e.g. CAEX, AutomationML, OPC UA, ISO 15926) along the Plant Life Cycle. Domain Specific Modeling and Programming Languages (e.g. IEC 61131, IEC 61499). Knowledge-Based Systems, Ontologies and Semantic Web in Automation Systems. Machine learning, artificial intelligence and big data technologies. IT Architecture techniques (e.g. Virtualization, Cloud computing, Block Chain and Distributed Ledger Technology) in Automation Systems. Vertical Integration, Integration with MES and ERP Systems (Databases, Semantic Web Services, Microservices). Energy Management in and by Automated Systems. Engineering Methods for Distributed Automation Systems and Cyber-Physical Systems. Software Reuse, Software Product Lines, and other Software Engineering Methods in Automation. Agile software development in Automation. Dynamically Reconfigurable, Adaptive, and Emergent Automation Software/Systems. Security and Safety in Factory, Energy, Home and Building Automation. Case Studies and Application Reports especially from: (1) Digital Factory, Smart Manufacturing, Web-of-Things in the Factory Line, (2) Home and Building Automation, (3) Renewable Energy Systems and Smart Grids (Production and Integration).

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@ieit.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 |

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