**18th IEEE International Conference on Emerging Technologies & Factory Automation**

**10-13 September 2013, Cagliari, Italy**

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**Sponsored by: University of Cagliari, Italy, and IEEE Industrial Electronics Society**

**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.

**Call for Papers**

**Track 1. Information Technology in Automation**

**Track Co-Chairs**

Alexander Fay, Helmut-Schmidt-University, Hamburg, Germany
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**Topics within the scope of the track:** Track 1 is focused on the development, adoption and application of information technology for automation systems. Papers should address the following research topics and technologies, but are not limited to:

- IT Modeling Techniques (e.g., Object-Orientation, Components, Agents, Services) for Automation Systems
- Model Driven Development 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 the Engineering of Automation Systems
- IT Architecture techniques (e.g. Virtualization, Cloud computing, Big Data) in Automation Systems
- Vertical Integration, Integration with MES and ERP Systems (Databases, Semantic Web Services)
- Engineering Methods for Distributed Automation Systems and Cyber-Physical Systems
- Software Reuse and Software Product Lines in Automation
- Dynamically Reconfigurable, Adaptive, and Emergent Automation Software/Systems
- Security and Safety in Factory, Home and Building Automation
- Energy Management in and by Automated Systems
- Case Studies and Application Reports especially from:
  - Digital Factory, Smart Manufacturing, Web-of-Things in the Factory Line
  - Home and Building Automation
  - Renewable Energy Systems and Smart Grids (Production and Integration)

**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; work-in-progress (WIP) sessions; panel discussions on the state-of-the-art and emerging trends, involving leading experts from industry and academia; and public discussion sessions moderated by leading experts in the field of industrial 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 and Industry practice – 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.

**Best Paper Award:** Best paper awards in Factory Automation and Emerging Technologies will be presented at the conference banquet dinner. Authors of outstanding papers will be invited to submit a revised version of their papers for publication in a special section of a leading journal.

**Paper Acceptance:** Each accepted paper must be presented at the conference by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

**No-show Policy:** The ETFA 2013 Organizing Committee reserves the right to exclude a paper from distribution after the conference at IEEE Xplore if the paper is not presented at the conference.

**Author’s Schedule:**

- **Deadline for submission of long and special sessions papers:** March 15, 2013
- **Notification of acceptance of long papers:** May 15, 2013
- **Deadline for submission of work-in-progress papers and Industry practice:** May 20, 2013
- **Notification of acceptance of work-in-progress papers and Industry practice:** June 20, 2013
- **Deadline for submission of final manuscripts – long and special sessions:** July 1, 2013
- **Deadline for submission of final manuscripts – work-in-progress papers and Industry practice:** July 1, 2013