

IEEE ETFA 2018

2018 IEEE 23rd International Conference on Emerging Technologies and Factory Automation
Torino, Italy, September 4-7, 2018

Special Session SS07. on Industrial Internet for the Factories of the Future



ORGANIZED AND CO-CHAIR BY

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OUTLINE

This special session is dedicated to bring together experts from various domains, such as IT, Telecommunication, and Automation, in order to elaborate on challenges in the area of industrial communication. Nowadays, several highly sophisticated technologies are implemented in factories to realize a high variety of industrial applications. These implementations are able to achieve high performances in terms of cycle times and reliability. However, this performance is typically only feasible within strictly defined technologies or vendor specific communication domains, so that the interoperability becomes a big issue. Moreover, configuration and management of these networks is solely possible using vendor specific tools. The current market situation brings new requirements towards flexibility, user-friendliness, and interoperability of the communication infrastructures. It is crucial to build industrial systems that are easy to rearrange, reconfigure, and in the same time offer high communication performance. To achieve this, innovative and high-level management concepts for heterogeneous and complex network infrastructures are needed.

TOPICS

- Future-proof, user-friendly, and dynamic network management concepts for the industrial automation
- Innovative algorithms and concepts for control of heterogeneous industrial networks
- Utilisation of solutions from the IT domain, such as SDN, NFV, or Cloud for network management and control
- Abstract modelling and mapping of application requirements and technology capabilities
- Safety and Security with regard to industrial network management systems
- Network Slicing models and corresponding implementation examples
- Adapters and functionalities for integrating legacy technologies or protocols for interoperability
- Concepts of future-proof architectures to support the upcoming 5G implementations

Author's schedule (NEW!!!):

- Deadline for submission of special session papers
 - April 27, 2018
- Notification of acceptance
 - June 1, 2018
- Deadline for submission of final manuscripts
 - July 6, 2018

For additional information please visit www.ieee-etfa2018.com