

# IEEE International Conference on Industrial Informatics INDIN'16

**18-21 of July 2016, Poitiers, France**

## Special Session on

### “Industrial Internet and Engineering of Automation Systems”

organized by

Valeriy Vyatkin (vyatkin@ieee.org)  
*Luleå University of Technology & Aalto University*

Jose Luis Martinez Lastra (jose.lastra@tut.fi)  
*Tampere University of Technology*

## Call for Papers

Theme: Industrial Internet is rapidly changing the landscape of manufacturing and other industrial applications. It will have seriously change the way how industrial automation systems are engineered. Now, with basic transparent connectivity achieved thanks to cheap and reliable Internet and mobile technologies, it is time to reshape the time-consuming and error-prone engineering of automation systems so that future automation systems will be collaborative and self-configurable. The emerging concepts of Internet of Things, Intelligent product converge to the promise of a breakthrough in achieving seamless reconfiguration without disrupting plant operations.

This special session calls contributions reporting on novel ideas how the future automation systems are to be engineered.

Topics of interest include, but are not limited to:

- New theories, concepts, trends and approaches aiming at automation systems **primarily based on peer to peer** communicating devices;
- Self-discovery, self-organization and self-reconfiguration achieved using cognitive and multi-agent systems and knowledge engineering;
- System and software architectures and engineering concepts for intelligent automation systems (model-driven software engineering, object-oriented, component-based design, service-oriented architecture, etc.);
- Standardisation of software architectures and communication protocols for interoperability, portability and configurability;
- Virtual worlds for realistic modelling, simulation and verification of industrial automation systems, simulation in the loop technologies;
- Mobile technologies assisting collaboration in automation systems;
- Pilot applications of automation systems based on the above mentioned concepts (e.g. in manufacturing systems, process control, building automation, smart grid, wireless sensor networks).

**Submission procedure, deadlines, and author instructions:** [see conference website](#)