

## "Industrial Communication Technologies and Systems"

**The Theme:** Industrial Communication Systems have become an increasingly essential part of many automation applications and are deployed in diverse areas such as factory automation, motion control, process automation, networked control systems, and building automation. The goal of this Special Section is to attract papers focused on industrial communication technologies, including modeling, analysis, and synthesis of provably correct systems, as well as characterization of application requirements, implementations, performance evaluation, validation, and case studies. Original contributions discussing new application areas and new developments are welcome.

Topics include, but are not limited to, the following research topics and technologies:

- Industrial Ethernet networks
- Industrial wireless networks, Wireless instrumentation and wireless sensor networks
- Fieldbus networks, Factory and process automation networks
- Automotive, train, and avionic networks, home and building automation networks
- Software Defined Networks.
- Power-system automation networks, smart grids and power-line communications
- Integration of automation networks
- IP-based and web-based industrial communications, machine-to-machine (M2M) communications
- Security and safety, dependability and fault tolerance in industrial communications
- Middleware for industrial communications and decentralized control
- Industrial Internet of Things (IIoT), Internetworking and interoperability
- Real-time communication and precise synchronization
- Cyber-physical and networked control systems
- Industrial communication case

Papers discussing new application areas and the resulting new developments at the interface of information technology and automation are especially welcome.

All contributions must focus on the use of information technology in automation. Results obtained by simulations must be validated in bounds by experiments or analytical results.

### Manuscript Preparation and Submission

Follow the guidelines in "Information for Authors" in the IEEE Transaction on Industrial Informatics <http://tii.ieee-ies.org/>  
Please submit your manuscript in electronic form through Manuscript Central web site: <http://mc.manuscriptcentral.com/tii>. On the submitting page #1 in popup menu of manuscript type, select: SS on Industrial Communication Technologies and Systems

Submissions to this Special Section must represent original material that has been neither submitted to, nor published in, any other journal. Before submitting manuscript check the review criteria (<http://tii.ieee-ies.org/o/RC.pdf>).

**Note:** The recommended papers for the section are subject to final approval by the Editor-in-Chief. Some papers may be published outside the special section, at the EIC discretion.

<b>Timetable:</b>	<b>Deadline for manuscript submissions</b>	<b>March 31, 2017</b>
	<b>Expected publication date (tentative)</b>	<b>October 2017</b>

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