

JOINT CALL FOR PAPER

16th IEEE International Conference on Factory Communication Systems and Special Section in the

IEEE Transactions on Industrial Informatics

Special Session Co-Organizers:

Hans-Peter Bernhard, Silicon Austria Labs, Johannes Kepler University, Austria

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SCOTT Consortium



WFCS Important Dates:

Regular submissions deadline: 12 January 2020

Notification:

2 March 2020

WiP submission deadline:

6 March 2020

Notification:

17 March 2020

Regular final versions:

13 March 2020

WiP final versions:

20 March 2020

Early registration deadline: 27 March 2020

Conference:

27 - 29 April 2020

Special Session on Trustworthiness and Security Focused Wireless Industrial IoT Networks

DESCRIPTION

The Industrial Internet of Things (IIoT) is one of the main impelling forces towards industry 4.0. Dependable wireless communication will empower industry to cope with the need for increased flexibility and cost reduction. Wirelessly communicating embedded systems enable new production methods (e.g. for lot size 1 production), individual tooling or autonomous vehicles. However, there seems still some lack of confidence for applying wireless solutions to industrial processes in a wider area. These demanding research challenges shall be discussed in a special session dealing with security and trustworthiness of wirelessly connected things.

This special session is organized by the European research project SCOTT (Secure COnnected Trustable Things), which started 2017 with a clear vision: "Building Trust in the Internet of Things" (https://scottproject.eu/).

As the new technologies of 5G are about to be introduced in cellular mobile communication, we invite researchers from that field to contribute as well. Ultra-reliable low-latency (URLL) communication of the 5G standard is an important concept to be applied in factories. Contributions from all layers aimed at security, protection and reliability are welcome to establish confidence in wireless communication.

Advanced wireless sensor networks (WSN) and IIoT concepts for industrial use cases in domains like automotive, aeronautics, building, health, robotics, smart manufacturing, with the focus on one or more of the following attributes: security, safety, reliability, trustability; Theoretical aspects of security, privacy, safety and trust for IIoT; Innovative energy-constrained and autonomous IIoT components; Dependable WSN with enhanced energy efficiency, robustness and quality-of-service; Physical layer and out-of-band security in WSN applications; Routing and scheduling algorithms for reliable real-time WSNs; Secure identification, authentication, authorization and communication in WSN; Trust anchors and trust indicators for secure IIoT systems; Concepts to include 5G URLL in secure wireless IIoT; Security and privacy concepts for 5G service providers and industrial requirements; Cloud computing services for safe and secure connected mobility applications.

SUBMISSION OF PAPERS:

All submissions must be up to 8 pages following IEEE conferences template and submitted through EasyChair. Upon submission, the authors must indicate whether they wish their paper to be considered for the Special Section of TII or just WFCS 2020. In the former case, the review process will dictate whether the paper follows with the regular track for WFCS 2020 or whether it will be considered for the SS on TII. In this case, a 4 pages summary of the paper will appear in the WFCS 2020 proceedings and the paper will follow another review round for possible publication in the SS on TII. All submissions to this Special Section on TII must go through WFCS 2020.

FURTHER INFORMATION:

Visit: www.cister-labs.pt/wfcs2020/

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