WFCS 2016

Joint Call for Papers

12th IEEE World Conference on Factory Communication Systems

Communication in Automation, and

Special Section on Communication in Automation

IEEE Transactions on Industrial Informatics

May 3-6, 2016

Aveiro, Portugal

Sponsored by:

University of Aveiro, Portugal
Telecommunications Institute, Portugal
IEEE Industrial Electronics Society

Description:

The aim of this joint Call for Papers is to stimulate the submission of regular and Work-in-Progress papers. Regular papers may be eventually selected for two different objectives: WFCS 2016 Proceedings and a Special Section of the IEEE Transactions on Industrial Informatics (TII). Authors interested in having their papers published in TII will be asked to state it explicitly and should prepare their papers following the recommendations indicated at the “Paper submission” page of the WFCS2016 website. These papers will undergo a first round of review that selects:

- papers potentially suitable for the TII
- papers potentially suitable for WFCS, but not for the TII

Subsequently, papers will follow different paths, in agreement with the result of the above selection. Authors of papers selected for possible publication in the TII Special Section will be asked to provide a short version of their papers (4 pages) that will be presented at WFCS and published in the conference proceedings.

Scope:

WFCS is the largest IEEE technical event specially dedicated to industrial communication systems. The aim of this conference is to provide a forum for researchers, practitioners and developers to review current trends in this area and to present and discuss new ideas and new research directions.

Focus on:

Real-time and Dependability in Industrial Communication Systems: message scheduling; task allocation; fault-tolerant communication; performance analysis; safety and security issues; synchronization.

System Integration in Industrial Automation Systems: vertical and life-cycle aspects; web-based setup, maintenance, and configuration; transparency vs. security; data-flow management; internetworking; hybrid wired/wireless industrial infrastructures; M2M communication, Plug-and-Work and self-* mechanisms.

Information and Communication Technology in Automation: system design; component-based systems, web frameworks; cloud computing, service-oriented architectures (SoA); mobile computing; modelling and specification techniques; formal methods; Internet of Things (IoT)/Internet of Services.

Recent advances in research domains with similar technical requirements: networked control systems; wireless sensor networks; smart grid communications and building automation networks; automotive and train-control networks; distributed real-time embedded systems.

Topics:

Fieldbus networks
Industrial Ethernet networks
IP-based networks
Industrial wireless networks
Fault tolerance in industrial communications
Networked embedded systems
Sensor networks
Building automation networks
Automotive and train-control networks
Factory and Process automation networks
Real-time communication and applications
Web-based communication and applications
Distributed application platforms
Safety and security in industrial communications
M2M communication
Fault tolerance in industrial communications
Configuration tools & network management
Internetworking & interoperability
System aspects
Case studies

Submission of Papers:

All submitted contributions (in English language) must contain original unpublished work. Papers that have been concurrently submitted to other conferences or journals (double submissions) will be automatically rejected.

Regular Papers: Up to 8 double-column pages in IEEE format, reporting on novel and significant contributions to the field of industrial communication systems.

Work-in-progress Papers: Up to 4 double-column pages, describing research that has not yet produced the results required for a regular paper, but that due to its novelty and potential impact deserves to be shared with the community at an early stage.

Author’s Schedule:

Deadline for submission of regular papers (firm): January, 22, 2016
Notification of acceptance of regular papers: March, 4, 2016
Deadline for submission of work-in-progress papers: March, 14, 2016
Notification of acceptance of work-in-progress papers: April, 14, 2016
Deadline for submission of final manuscripts (regular): April, 1, 2016
Deadline for submission of final manuscripts (WIP): April, 21, 2016

Further information: visit http://www.av.it.pt/wfcs2016/ or contact Paulo Pedreiras (pbrp@ua.pt)