

CALL FOR PAPERS

6th IEEE International Workshop on Factory Communication Systems



June 27-30, 2006
Torino, Italy



Sponsored by: IEIT-CNR and ANIPLA-Torino, Italy
IEEE Industrial Electronics Society

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Scope: The WFCS workshop is the largest IEEE technical event specially dedicated to industrial communication systems. The aim of this workshop 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. Previous workshops were held in Leysin, Switzerland, in Oct. 1995, Barcelona, Spain, in Oct. 1997, Porto, Portugal, in Sept. 2000, Västerås, Sweden, in Aug. 2002, and Vienna, Austria, in Sept. 2004.

Focus on:

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

Vertical Integration in Industrial Communication Systems: web-based setup, maintenance, and configuration; transparency vs. security; data-flow management; internetworking; hybrid wired/wireless industrial infrastructures.

Information and Communication Technology in Automation: system design; distributed objects, components and web frameworks; mobile computing; network computing; client/server computing; modelling and specification techniques; formal methods.

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

Workshop topics:

Fieldbus networks
Industrial Ethernet networks
IP-based networks
Industrial wireless networks
Automotive and train-control networks
Embedded systems and networks
Building automation networks
Wireless sensor networks

Real-time communication and applications
Web-based communication and applications
Distributed application platforms (CORBA, Java/Jini, etc.)
Safety and security in industrial communications
Fault-tolerance in industrial communications
Configuration tools and network management
Internetworking and interoperability
Case studies

Workshop format: The workshop will comprise single-track plenary sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations; work-in-progress (WIP) sessions; two panel discussions on the state-of-the-art and emerging trends, involving leading experts from industry and academia; and a public discussion moderated by a leading expert in the field of industrial communication systems.

Submission of Papers: The WFCS workshop is seeking submissions of 8 to 10 double-column pages, reporting on novel and significant contributions to the field of industrial communication systems. Prospective authors are encouraged to submit a pdf version of their papers, through the WFCS submission system. The submitted material (in English language) must be unpublished and not under submission elsewhere. Submissions must include s-mail/e-mail addresses and fax/phone numbers of the corresponding author.

Work in Progress (WIP) sessions: These sessions are intended for presentation of recent ideas and on-going works. Accepted papers will be published in the workshop's proceedings. WIP submissions (not exceeding 4 double-column pages) must be also submitted through the WFCS submission system.

Paper Acceptance: The final manuscript must be accompanied by a proof of the full registration fee payment (authors presenting more than one paper, must pay a registration fee per paper). All conference attendees, including authors and session chairpersons, must pay the conference registration fee.

Best Paper Award: The best paper of the event will be distinguished at the workshop's banquet dinner with an award. Authors of outstanding papers will be invited to submit a revised version of their papers for publication in a special section in IEEE Transactions on Industrial Informatics.

Author's Schedule:

Deadline for submission of regular papers:

January 10, 2006

Notification of acceptance of regular papers:

March 1, 2006

Deadline for submission of work-in-progress papers and industry practice:

March 20, 2006

Deadline for submission of final manuscripts:

April 20, 2006

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Further information: <http://wfcs2006.ieit.cnr.it>