



CESCIT 2012



1st IFAC Conference on
Embedded Systems, Computational
Intelligence and Telematics in Control



April 3-5, 2012, Würzburg, Germany
<http://www7.informatik.uni-wuerzburg.de/cescit>



Call For Papers

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Scope

The conference focuses on theories, applications and developments in control related research fields, covering three major topics: computers for control, computational intelligence in control and control via communication networks.

Computers for control considers a broad range of computer-based control systems, spanning from system architectures, inter-computer communications, man-machine interfaces for real-time distributed computer control systems to programmable logic controllers, Fieldbus and standards-based platforms and environments, etc.

Computational intelligence in control focuses on all aspects of knowledge-based, fuzzy, neuro-fuzzy and neural (both artificial and biologically plausible) systems and evolutionary algorithms relevant to control, both theoretical and application driven.

Control via communication networks encourages topics of computerized and telecommunication based automation systems, providing services to remote equipment. This addresses systems integrating methods of remote control, cooperative communication for remote applications, and remote sensor data acquisition.

Topics

Computer/system architectures for control e.g. in robot-formations, satellite swarms, etc.

Fieldbus and standards-based platforms & environments

Logical design, physical design and implementation

Programmable logic controllers (PLC's), Inter-computer communications

Local-area networks, Cooperative communication for remote applications

Man-machine interfaces for distributed control systems, e.g for mobile & medical robots

Modeling, identification, stability analysis & adaptation in space & robotic applications

Forecasting, learning and evolutionary algorithms

Brain-computer interfacing, bioinformatics, medical robotics

Predictable time and behavior under failure conditions, Reliability and maintainability

Remote control methods, in particular networked, supervisory and distributed control

Remote sensor data acquisition, Telematics applications, remote industrial automation

Specific application areas, e.g. traffic control, automotive, medical robotics, etc.

Embedded systems applications, industrial projects, case studies

Important Dates

Submission of full draft papers : September 15, 2011

Notification of acceptance: December 15, 2011

Submission of final paper (6 pages): February 15, 2012

Conference: April 3-5, 2012

Links (Email: cescit2012@informatik.uni-wuerzburg.de)

Conference home page: <http://www7.informatik.uni-wuerzburg.de/cescit>

Submission of papers: <http://ifac.papercept.net/>

Instructions to authors: <http://www.ifac-control.org/events/information-for-ifac-authors/>

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