

CALL FOR PAPERS

Special Session on Intelligent Real-time Automation and Control Systems

to be held in the frame of
IECON 2013 - The 39th Annual Conference of the IEEE Industrial Electronics Society
10th - 13th of November 2013, Austria Center, Vienna, Austria



TOPIC OF THE SPECIAL SESSION

Industrial automation and control systems in the manufacturing, power and energy systems as well as logistics sector becoming more and more complex. Usually a huge amount of actuators and sensor in such systems are working together as network of different devices. The latest trend in the research & development shows that the-se devices are becoming intelligent which means that they can perform autonomously tasks. In order to master the complexity of such highly interconnected and collaborative devices advanced methods and concepts along the whole life-cycle are necessary. Especially, lower level control services have to provide advanced functions which includes reconfigurability, real-time execution (time-triggered, event-based), diagnostics, etc. Therefore the main aim of this working group is to discuss recent research & development results, industrial applications as well as standardization issued related to intelligent real-time automation and control systems.

In particular, this session will be focusing on (but not limited to) the following topics:

SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10th to 13th November 2013.

Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



- Software engineering methods for (embedded) automation and control systems
- Component-based design of automation and control systems
- Distributed control concepts
- Automation objects / components
- Model-based system and software engineering for automation systems
- Model-driven design of automation and control systems
- Latest developments of standards (e.g., IEC 61131-3, IEC 61499, IEC 61850, etc.)
- Application development practices and experiences
- Metrics of success in software development in automation

SUBMISSION OF PAPERS

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

THE CONFERENCE

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.