

CALL FOR PAPERS

Special Session on Resilience and Security in Industrial Agents and Cyber-physical 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

Cyber-physical systems (CPS) are a strategy to address the challenge of developing solutions combining mechatronics and ICT technologies, to face the current requirements imposed by customers acting in a global economy. The use of CPS aims to increase the implementation of large-scale systems, improving the adaptability, autonomy, efficiency, functionality, reliability, safety, and usability of such systems. These systems, developed using multi-agent systems, web services, etc., are being applied to diverse areas as manufacturing, automotive, chemical processes, energy (smart grids, renewable energies), logistics and building automation.

In such systems, resilience and security are critical issues in industrial applications and systems, especially those that are mission critical. The resiliency approaches often aim to adapt to highly non-linear, often ill-defined disturbances, which are frequent in such cyber-physical systems.

This special session seeks contributions providing requirements, challenges, methods, tools, techniques, experiences, demonstrations and roadmaps that will

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



help the development of resilient and secure industrial cyber-physical systems and agents. Topics of interest include, but are not limited to:

- Resiliency, recovery and security of complex control systems, and particularly in cyber-physical systems;
- Resilience and security in multi-agent systems;
- Resilience and security in service-based systems;
- Computational intelligence approaches in resiliency;
- Applications in industrial domains, such as manufacturing, power and energy systems (smart grids), robotics and logistics.
- System modeling and simulation
- Petri nets and model-driven development
- Prototyping, animation, code generation and execution
- Supervisory control
- Performance evaluation and optimization
- Planning and scheduling
- Relationships between Petri Nets and other approaches
- Design automation and computer tools for nets
- Standardization of nets
- Practical applications and industrial case studies

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.