

Special session on “Advanced Software Engineering in Industrial Informatics and Factory Automation”

INDIN 2010

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<http://indin2010.ist.osaka-u.ac.jp/index.html>

Session Chairs:

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This session is a follow up of a very successful session at INCOM'09. The aim of this session is to present new approaches and methods for the design of automation and embedded control systems software which follows the latest trends from the software engineering domain. Software becomes the most complex, expensive, error-prone and inflexible part of industrial systems and trends are observed at all layers of enterprise IT, from the factory floor, up to the business logic and management support.

Advanced software engineering solutions have a great impact on the efficiency of automation systems design. In particular, the session will be focusing on (but not limited to) the following topics:

- New programming languages and tools
- Visual programming
- Artificial intelligence methods and languages in automation
- Model-based system and software engineering
- Equivalent code transformations, Refactoring
- Extreme programming
- Aspect-oriented programming
- Quality assurance methods: testing, simulation, formal verification
- Automatic code synthesis
- Execution semantics of automation software
- Latest developments of standards (IEC 61131-3, IEC 61499)
- Application development practices and experiences
- Metrics of success in software development in automation

Submission

Submitted papers (6 pages in IEEE double column format) will be reviewed by three referees. Both academic and industrial oriented communications will be considered. All papers accepted for presentation will appear in the Preprints and will be distributed to the participants. Further submission instructions are available on the IEEE website. Several international journals are associated with the symposium for publication of special issues.

Important dates:

January 15, 2010: deadline for paper submission March 20, 2010: notification of acceptance/rejection
