

12.04.2017: Call for Papers / Call for Workshop Contributions

SPI in Industry 4.0 – The Digitalization of Design and Manufacturing

Workshop 2 at the 24th EuroAsiaSPI 2017 Conference
5.-8. September 2017
VSB Technical University of Ostrava, Czech Republic
<http://2017.eurospi.net>

Workshop Program Chairs & Moderators



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Definition of Industry 4.0

Electronics and software not only redefine everyday products but also the latter's manufacturing environments. Industry 4.0, the Fourth Industrial Revolution, signifies the digitalization of manufacturing, the networking of machines and complete plants, as well as their moving into the cloud. Production lines are turned into Cyber-physical Systems that are managed by a configurable and programmable network of work stations. Plants will even develop a kind of intelligence thanks to the sharing of data, parameters, capabilities and functions allowing them to adjust their behavior to the product, the environment and several other influence vectors.

This revolution requires new competences and skills, the upgrade of existing skills, as well as new system design and control concepts. Cybersecurity has become a fundamental prerequisite for the deployment of Industry 4.0. .

Key Contributors

The idea of this workshop community is **to elaborate a set of best practices and success factors for the implementation of industry 4.0.** The workshop is open to include experts who are willing to share their best practices with the community.

Call for Workshop Contributions

The idea of this workshop community is to elaborate a set of best practices and success factors for the implementation of Industry 4.0 in existing industrial organizations. To this aim, it seeks to network design and manufacturing experts with the IT and SPI community.

AQUA (Automotive Quality Knowledge Alliance, 2012-2015) is an EU funded skills alliance which developed a tool kit to teach an integrated approach of Automotive SPICE, functional safety, and production quality (Lean Six Sigma). The tool kit is now used by a cluster of universities in the EU project AQU (Automotive Quality Universities) in the master program of Automotive engineering studies. This AQU and AQUA concept will need to be updated to include industry 4.0 as a pillar.

Relevant topics, among others:

- Cybersecurity issues in Industry 4.0
- Product and Systems Design in Industry 4.0
- Process challenges and solutions in industry 4.0
- Real-time Communication and Control and issues in Industry 4.0
- Big Data in Industry 4.0
- Virtual and Augmented Reality approaches to Industry 4.0
- Knowledge, skills and competence requirements in Industry 4.0
- Social and organizational impacts in industry 4.0
- Change Management in Industry 4.0
- Technology and Innovation Planning in Industry 4.0

Interactive Workshop Approach

Focus of interest and main questions discussed during the workshop will be:

- Best and next practices to develop and deploy Industry 4.0 concepts.
- Standards to be considered in implementing Industry 4.0.
- Bad practices/experiences (what not to do) to deploy Industry 4.0 concepts.
- How can existing organisations adapt to Industry 4.0 in terms of skills, roles, competencies, system environment, software environment, etc.
- Which assessment model can be used to measure the capability of an Industry 4.0 organisation?
- Which Cybersecurity Concepts and Standards are needed?

Each presentation will contribute topics for interdisciplinary discussion in the group. Finally, a panel discussion shall come up with a summary of the research and industry challenges and solutions identified and elaborated further for the next EuroAsiaSPI² conference edition.

Submission Dates

12.04.2017	First Workshop Paper Submissions
30.04.2017	Review by International Programme Committee and Notification of Acceptance
12.06.2017	Camera Ready Version of Paper for Book
31.07.2017	Early Registration Deadline (All presenters register)
30.08.2017	Upload of Powerpoint Conference Presentation

EuroAsiaSPI²2017

European & Asian System & Software Process Improvement and Innovation

Sponsorship for best papers



There will be a sponsorship for the best research papers dealing with one of the following topics:

- Best practices for Industry 4.0
- Adaptions and norms for Industry 4.0

The sponsorship includes a complete early bird ticket for the EuroAsiaSPI 2018 Conference. Papers based on surveys in the industry are especially welcomed.

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SPRINGER Book Series

EuroAsiaSPI is publishing an annual SPRINGER book which has ca. 13000 downloads per year. **The workshop papers** will form a **chapter** for best practices in Agile/Lean in the **SPRINGER book**.



Join in and submit your paper before 12.04.2017 to:

<http://eurospi2017.net> ---SUBMISSION

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This includes the WS program chairs plus reviewers / experts from the EuroSPI Program Committee:

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