

Call for Contributions

Inform the Chair: with the Title of your Contribution

Submission URL: <https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=PESARO+2017+Special>

Please select Track Preference as **ESITIS**

Special track

ESITIS 2017: Evolution of Safety in Transportation and Industrial Systems

Chair and Coordinator:

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along with PESARO 2017

The Seventh International Conference on Performance, Safety and Robustness in Complex Systems and Applications

<http://www.iaria.org/conferences2017/PESARO17.html>

The presented papers will be invited as extended version for a *Special issue* of the Journal

International Journal On Advances in Intelligent Systems

Journal site: http://www.iariajournals.org/intelligent_systems/index.html

Access-free Digital Library: www.thinkmind.org

Arising complexities in design, construction and operation of transportation and industrial systems challenge the commonly practiced safety approaches and become more and more important to both public and private sectors. In transportation, safety, human factors, and availability are among the most important performance indicators for success. For industrial systems, societies demand continuously higher standards for design, production and use of well-engineered products or systems. The interdisciplinary nature of these systems links their safety to all system components and system layers making it hard to rely on one single solution for tackling of safety problems. While the safety culture of an organization undoubtedly influence the end-product or service, new technologies promise opportunities and at the same time impose risks on system safety.

The complexity of tightly-coupled systems makes them more prone to risk and enlarges the domino effects of faults or accidents. Emergence of big data can help making safer systems provided proper data analytics and automation. Elicitation of data and its fusion with precise data is still a challenge for researchers. While system designers need to consider these challenges in early project phases, unexpected events remain to be expected. Security and cyber-security concerns constantly influence system safety, and safety measures relate to security concerns. Thus, the traditional safety toolbox must be updated to meet these challenges. The technology helps raising awareness, sharing our understanding, training experts, communicating more effectively, and simulating possible unfavorable scenarios. Yet limited resources keep influencing safety, and other performance indicators like cost and availability might become prior to system safety.

The model-based systems engineering or similar integral approaches promise to resolve some of these concerns through an integral framework. Organizational culture, effective safety management and proper use of big data analytics and machine learning can be utilized to improve system safety.

Topic of interest include, but are not limited to, the following

Safety culture, its assessment and influence
Optimal use of information for system safety
Safety surprises and their domino effects
Elicitation of safety information
Safety training technologies
Influences of security on safety
Model- based systems engineering for safety
Automation and data analytics for system safety

Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: ~~January 15~~ **March 15**
- Notification with comments for camera-ready: ~~February 20~~ **March 22**
- Registration: ~~March 5~~ **April 1**
- Camera ready: ~~March 15~~ **April 1**

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=PESARO+2017+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

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