

EuroAsiaSPI² 2020 Architecture

EuroAsiaSPI² 2020 (9.-11.9.2020) will have **10 international thematic workshop streams** supported by thematic topic communities. Each thematic stream **integrates both, research sessions and industry / applied science sessions**. The thematic streams will be a mix of pitch talks provoking discussions, full presentations and panel discussions which will focus on specific topics of interest. In addition there will be a workshop about new ideas for European funding proposals.



EuroAsiaSPI²2020

European & Asian Systems, Software, Service,
Safety & Security Process Improvement & Innovation

CALL FOR PAPERS for the

27th EuroAsiaSPI² Conference

EuroAsiaSPI² Call for Thematic Papers

Submitted papers are grouped into major topics which can be attended in form of workshops.

Emerging and Multidisciplinary Approaches to Software Engineering

Digitalisation of Industry, Infrastructure, and E-Mobility

SPI Manifesto and Good and Bad Practices

Functional Safety and Cybersecurity

Agile and Lean

Standards and Assessment Models

Accessibility, Team Skills and Diversity

Innovation (New Service Models, AI, Machine Learning)

Virtual Reality / Augmented Reality / Mixed Reality

New Ideas for Funding Proposals

Selected workshop papers are published as a special chapter in the annual EuroSPI SPRINGER book in the CCIS series.

Selected extended papers will be published in the WILEY Journal of Software: Evolution and Process.

Selected extended papers about emerging and multi-disciplinary approaches to software engineering will be published in the IET Software Journal.

Selected extended functional safety and cybersecurity papers will be published in the JUCS journal.

Deadlines

...for a **Research or Industry Paper** :

10.04.2020 Upload First Version of Paper

30.04.2020 Review by International Programme Committee and Notification of Acceptance

05.06.2020 Camera Ready Version of Paper for Book

07.08.2020 Early Registration Deadline (All presenters must register, otherwise the contribution is deselected)

Further journal submission deadlines are online available.

Jointly Building an SPI Manifesto

In 2009 at the 16th EuroSPI conference an SPI Manifesto has been created which outlined the values and principles to make improvement really work:

<http://2020.eurospi.net/index.php/manifesto>

In 2020 the success stories attached to the SPI Manifesto will be updated. The **best 3 submissions** which address a specific principle of the SPI manifesto **will win a free registration**.

<http://2020.eurospi.net>

9. - 11. September 2020

Hochschule Düsseldorf

University of Applied Sciences

(Germany)

 Springer **HSD** WILEY



EMERGING AND MULTIDISCIPLINARY APPROACHES TO SOFTWARE ENGINEERING

Engineering software products requires a vision of thinking across boundaries for the future which goes further than what we have so far conceived. To address these concerns and establish a strategy that will achieve a broader vision, researchers seek ways to adopt techniques from multiple academic disciplines and draw knowledge from various areas to design complex software based systems.

DIGITALISATION OF INDUSTRY, INFRASTRUCTURE AND E-MOBILITY

Digitalisation of industry, vehicles, planes, infrastructure, services leads to new system and software architectures, new standards to be followed, new use cases, new service models, and so forth. The EU Blueprint project DRIVES came up with a set of major drivers of change which are used as thematic paper topics.

SPI MANIFESTO AND GOOD AND BAD SPI PRACTICES

Values and principles of the SPI Manifesto, organisational best practices, experiences with bad practices, update of the SPI-Manifesto with new success stories submitted in 2020.

FUNCTIONAL SAFETY AND CYBERSECURITY

ISO 26262 and IEC 61508 experiences, medical device related safety norms, integrated safety and Automotive SPICE assessments, design patterns, SEooC strategies, FTA, diagnostic coverage, FIT, new norms, SOTIF - Safety Of The Intended Functionality.

SAE J3061, ISO 21434, ISO 27000, cybersecurity norms, experiences with cybersecurity methods (STRIDE, EVITA, etc.). Specific experiences with attack trees, cybersecurity concepts, new system and software architectures and networks. Integrating functional safety and cybersecurity.

AGILE AND LEAN

The Agile Manifesto, lean and agile, best practices in development, improvement projects, business processes. Agile in industry branches such as Automotive, IT services, aerospace, medical devices, and production.

ACCESSIBILITY, TEAM SKILLS AND DIVERSITY

Accessibility as a chance for new services and innovation, social and complementary skills needed in nowadays distributed and networked engineering and production. Effective teams, communication, compliance, terminology, acceptance of process improvement, and organisational leadership styles. Design patterns for effective networks and organisations.

STANDARDS AND ASSESSMENT MODELS

ISO/IEC, SAE, IEEE standards/guidelines to be considered in systems, software services assessment, development, improvement, ISO/IEC 330xx norm series, IATF 16949, ISO 26262 and new Norm Parts published in 2018, VDA Blue Gold Book, Automotive SPICE 3.1, Volkswagen KGAS Criteria, SOTIF - Safety of the Intended Functionality, SAE J3061 Cybersecurity Norm, ISO 27000 Security Norm, ISO 20000 Service Norm, New norms to be considered, including System of Systems (SoS) considerations.

INNOVATION (NEW SERVICE MODELS, AI, MACHINE LEARNING)

New topics can be proposed for the workshop such as service innovation models, new business models for e-mobility, machine learning, artificial intelligence, etc.

VIRTUAL REALITY / AUGMENTED REALITY / MIXED REALITY

The spectrum of application domains for Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) is constantly increasing, no matter if in entertainment, retail, marketing, manufacturing, logistics, healthcare or space exploration. And there is a huge potential in interdisciplinary teamwork. The aim of this workshop is to explore both technical and methodological aspects of Virtual Reality, Augmented Reality, Mixed Reality, through dynamic and reciprocal exchange of knowledge and experience.

NEW IDEAS FOR FUNDING PROPOSALS

Presentations and discussions about new EU funding proposals and partnerships.

ASSOCIATED TECH DAYS

On 8.9.2020 before the EuroAsiaSPI² 2020 conference there will be associated tech days.

It is planned to have a medical device industry conference day, and in parallel a day about assessment and improvement tools and technologies.

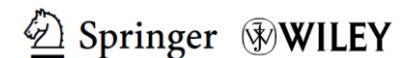
Research & Industry Sandwich

Research papers will not be presented in an extra research stream, but will be integrated as research sessions into the thematic workshops/streams in a sandwich position between industry papers. This will create a better integration and networking of research and industry / applied science and fertilize the grounds for a technology transfer at european level.

Thematic workshop papers will be published in the **Springer CCIS Series as a special chapter in the book**. 18 selected research papers will be published in the **Springer CCIS Series** in a research chapter. **10** papers will be selected for **publication in the Wiley Journal of SW Evolution and Process series**. Further selected extended papers will be invited to additional cooperating journals.

A EuroAsiaSPI² 2020 journals editorial team will select papers from the book and propose an extended version (50% must be different) to be published in a journal. This applies for WILEY Journal of Software: Evolution and Process (SPI Best Practices), and in 2020 it is also planned to collaborate with IET Software (Gamification), and J.UCS (Journal of Universal Computer Science) for Safety and Cybersecurity.

Papers should comprise 8 - 12 pages and follow the SPRINGER CCIS series formatting guidelines. Writing instructions, templates and how to upload papers can be found at <http://2020.eurospi.net>. **Select the menu SUBMISSION.**



NETWORKING

We believe that networking and fostering and establishing research and business relationships is essential for growing a sustainable community of improvement and innovation. While the conference offers ideas, presentations, discussions, during the day, the social talks after the conference are equally important to establish trust and partnerships. **Join the networking space and social events.**

We truly believe that SPI must involve people actively and affect their daily activities (Value A, SPI Manifesto).