



Industry Call for Papers

16th International Conference on Software and System Processes (ICSSP), May 20-22, 2022

Jointly held with the International Conference on Global Software Engineering (ICGSE)

Envisioning the Future of Software Engineering Process & Practice for Global Competitiveness and Innovation

The ICSSP will once again join forces with ICGSE for a joint conference hosted and co-sponsored by Carnegie Mellon University Software Engineering Institute (SEI) in Pittsburgh, Pennsylvania (USA). The city of Pittsburgh—once a center for the production of steel, iron, and glass, is now a world-recognized leader in software engineering, computer science, robotics, artificial intelligence, medicine and many other high-tech industries, making it the perfect background for our conference!

Industrial practitioners are invited to submit experience reports and talk proposals to the **ICSSP/ICGSE 2022**

Industry Track within the EasyChair system. This track seeks reports, presentations, and discussions about significant real-world issues and practical solution ideas.

The ICSSP 2022 theme is: "Envisioning the Future of Software Engineering Process & Practice for Global Competitiveness and Innovation." The conference's goal is to advance both the state of the research and the state of the practice by applying innovative ideas from different fields of research to the future of software engineering processes and globally distributed software development.

Industry track submissions are expected to have a strong focus on the real-world application of techniques, tools, methodologies, processes, and practices. Submissions should clearly identify the problem that is addressed, the industrial context, and the outcomes, as well as the expected learning for the audience.

In the conference program, experience reports and industry talks will be blended with research papers to provide a forum for idea and experiences exchange between researchers and practitioners.

Industry Co-Chairs

Ricardo Britto, Ericsson, Sweden

Rajeev Gupta, Siemens Healthineers, India

Important Dates

Experience Reports

Submission: **January 14, 2022**

Conditional Acceptance Notification

(Start of Shepherding): **January 21, 2022**

Go/No-Go based on Shepherding Judgement:

February 18, 2022

Camera Ready: **March 25, 2022**

Industry Talks

Abstract and Slide Package Submission:

January 14, 2022

Notification: **February 18, 2022**

Slide Package Camera Ready: **March 11, 2022**

Topics of Interest

Business Strategy

- Hiring in global settings
- Startup and entrepreneurship in software process and distributed development
- Processes and practices for cross-company collaboration
- Supplier management in global settings
- Economics of distributed software development
- Team building in WFX
- Competitiveness and innovation in WFX settings

Work from Anywhere (WFX)

- Emerging processes supporting remote work
- Infrastructure for WFX
- Hiring and economics of WFX

Education and Training

- Software process management (SPM) education
- Global and distributed SE curricula
- Lessons learned on SPM or GSE courses

Future and Innovation Related to Software Process and Collaboration

- Process for embedded and IoT systems ALM/PLM for distributed teams
- Software processes for augmented, virtual, and extended reality (AR/VR/ XR)
- Use of AR/VR/XR in distributed settings
- Software Process for low-code development practices
- Quantum programming and software engineering
- Software process for blockchain
- Blockchain to improve/enhance global software development
- Software developers' experience (DX) Software developers' relationship (DevRel)
- Process and infrastructure for software applications in scientific research

Fairness, Accountability, Transparency, and Ethics in Software Process and Development

- Engineering societal-scale software systems
- Fairness in software process
- Processes to assure equity in software development
- Ethics in the software development process
- Ethical behavior in global and distributed settings

Methods and Processes

- DevOps
- Software delivery performance
- Chatbots and continuous integration
- Agile methods in co-located and distributed companies, projects, and teams
- Lean development

Hybrid Processes

- Pair programming and mob programming
- Open-source software development
- AI for supporting software and systems processes
- Processes for developing AI-based systems
- Software representation and design (architectures, components, and services)
- Empirical studies and experiences

Human Aspects of Distributed Software Development and Processes

- Human-centered and participatory processes
- Team building
- Turnover and retention
- Trust and social relationships
- Newcomers' onboarding and socialization

Systems-Software Interfaces

- Agile systems and software engineering
- Connecting systems and software engineering
- Software and systems modeling
- Distributed systems and software engineering

How to Submit Experience Reports and Industry Talks

The two types of opportunities for contribution should follow the following guidelines:

- **Experience Report** - Submit a 5-page paper (excluding references) making use of the official ACM conference template. Submissions not following this template will not be accepted. Experience reports will undergo a peer review by the program committee and accepted reports will be included in the conference proceedings.
- **Industrial Talk** - Submit an abstract of a maximum of 300 words using a template of your choice including: the title of your talk and your contact details and affiliation; the content of the talk describing the issue that is addressed in the talk, the technique, tool, or practice that is applied, the outcomes and the main take-away message for the audience; your experience on the topic of the talk and your contribution to the work. Together with your abstract, submit the slide package you plan to present. Note that accepted proposals will not be included in the conference proceedings.

For accepted proposals (Experience Reports and Industrial Talks), the duration of presentations should not exceed 15 minutes.

Shepherding of Experience Reports

We know it's not easy to get an idea on paper. Whether you're a first-time author or you already have some publications under your belt, we can all benefit from some guidance and help with our writing. 'Shepherding' is a process where more experienced authors will guide and coach you as you write your experience report paper. If your proposal is accepted, you will be assigned a shepherd to work with you to help you shape your paper and get it ready for publication. Shepherds work closely with authors, reviewing drafts and freely giving advice. Shepherds ask clarifying questions and suggest improvements. But ultimately, it is you, the author, who decides what to say and how to say it. A shepherd is not an editor, although they may generously make detailed comments on how to revise your paper. Once the shepherd and the program committee agree that your report is acceptable, you will have time to make final revisions before the paper is published.

Submission site

Submissions must be made through either the ICSSP/ICGSE Experience Reports or Industry Talks track on the ICSSP 2022 submission site on EasyChair <https://easychair.org/conferences/?conf=icssp2022> no later than the applicable submission deadline. Be sure to direct your submissions correctly and select the appropriate submission type when uploading your submission.

We encourage authors to upload their experience report or industrial talk early to support the management of the review process. The experience report PDF may be submitted later, but still by the submission deadline.

About the SEI

The Software Engineering Institute is a federally funded research and development center (FFRDC) that works with defense and government organizations, industry, and academia to advance the state of the art in software engineering and cybersecurity to benefit the public interest. Part of Carnegie Mellon University, the SEI is a national resource in pioneering emerging technologies, cybersecurity, software acquisition, and software lifecycle assurance.

Contact Us

CARNEGIE MELLON UNIVERSITY
SOFTWARE ENGINEERING INSTITUTE
4500 FIFTH AVENUE; PITTSBURGH, PA 15213-2612
sei.cmu.edu
412.268.5800 | 888.201.4479
info@sei.cmu.edu