



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!



The Software Engineering Institute at Carnegie Mellon University

Overview

ICSSP 2022 aims to bring together researchers and practitioners to share their research findings, experiences, and new ideas on diverse topics related to software and system processes and global software engineering. The 2022 theme is: “Envisioning the Future of Software Engineering Process & Practice for Global Competitiveness and Innovation.” The 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 process and globally distributed software development.

The SEI is proud to co-sponsor and host ICSSP 2022 and bring the conference back home to where much of the early software engineering work originated, including foundational work in process management, measurement, architecture, and software assurance.

Organizing Committee

General Chair

Anita Carleton, CMU SEI, United States

Program Chairs

Regina Hebig, Chalmers University of Technology, Gothenburg, Sweden

John Robert, CMU SEI, United States

Igor Steinmacher, Federal University of Technology – Paraná, Brazil

Publicity Chair: Eray Tüzün, Bilkent University, Turkey

Industry Chair: Ricardo Britto, Ericsson, Sweden

Important Dates

Full (10 pages) and Short (5 pages) Research Papers

Abstract Submission: **January 17, 2022**

Paper Submission: **January 24, 2022**

Notification: **March 4, 2022**

Camera Ready: **March 25, 2022**

For information about other tracks (Doctoral Symposium, Industry track, J1C2), please refer to our website: <https://resources.sei.cmu.edu/news-events/events/icssp>

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

Submission site

Submissions must be made through the ICSSP (and ICGSE) 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 paper info early (the PDF may be submitted later, but still by the submission deadline) to support the management of the review process.

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

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