FOCUS. With the emergence of Cyber-Physical Production Systems (CPPSs), systems engineers are currently facing a dramatic increase in the complexity of developing and operating systems. In particular, software plays a crucial role in the effective and efficient operation of CPPSs. Despite the tremendous progress in software engineering approaches and technologies, they do not seem to reach industry. More comprehensive and systematic views on all aspects of systems and their development process are required. The Special Session on Software Engineering for Cyber-Physical Production Systems aims to discuss challenges in adopting state-of-the-art software engineering approaches and technologies to CPPSs, and highlight new methods for the design of software for production systems.

TOPICS

- Software engineering improvements for and transfer of best practices to CPPSs (e.g., agile methods)
- Operation, evolution, and management of CPPS software (e.g., DevOps)
- Software modeling and languages for CPPSs (e.g., model-driven engineering)
- Interdisciplinary collaboration in the engineering and operation of CPPS software
- Software engineering education for CPPS engineers
- Security, resilience and sustainability of CPPS software by design
- Usability of software development environments for CPPS engineering

AIM. The aim of the Special Session is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the area of software engineering for factory automation.

CONFERENCE FORMAT. The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

AUTHOR’S SCHEDULE (2023)

- Regular and special sessions papers
  Submission deadline ...................... March 31
  Acceptance notification .................. May 5
  Deadline for final manuscripts .......... June 16

- Work-in-progress/Industry practice papers
  Submission deadline ...................... May 12
  Acceptance notification .................. June 9
  Deadline for final manuscripts .......... June 16