2nd International Workshop on Multi-concern Assurance Practices in Software Design (MAPSOD 2022)

Call for Papers

September 6th, 2022

The MAPSOD workshop at SAFECOMP is focussed on the topics of architecture and design trends supporting multi-concern assurance of software-intensive systems of high relevance to software practitioners. Special emphasis will be devoted to promoting discussion and interaction between researchers and practitioners focused on addressing these various concerns within the architecture and design of these systems in the context of the subjective and often contradicting, competing, and conflicting needs and beliefs of stakeholders, and to do so with a level of confidence that is commensurate with the tolerable loss consequences associated with each of these objectives. Furthermore, an important focus is on rethinking the concept of assurance and certification, taking into account the nature and the full range of design concerns of software-intensive systems.

MAPSOD aims to bring together members of the research, industry, and other communities from various fields involved in the evaluation, assurance, and certification of software-intensive systems, with a particular focus on the transfer of results from fundamental research in model-based development, and tool-supported methodologies for the development of software architectures and assurance cases which address multiple system characteristics including security, safety, reliability, availability, and robustness that can find practical application in the industrial development of cyber-physical systems. Furthermore, industrial perspectives on how to adopt development processes supporting design activities that are flexible enough to support multi-concern assurance while minimizing additional time, effort, and costs is of interest.

We encourage submissions with high quality research contributions, work in progress, experimental and ongoing projects results on any aspect software architecture and design supporting multi-concern assurance including, but not limited to,

- Multi-concern assurance for co-analysis, co-engineering and/or co-assurance of multiple system characteristics (e.g., security, safety, reliability, availability, robustness, etc.)
- Defining resilient architectures for achieving multiple system characteristics and managing their trade-offs
- Approaches for multi-concern assurance including: Architecture-driven assurance, Design- centered assurance, Model-based assurance
- Development processes integrating multi-concern assurance
- Quality assurance techniques such as testing and analysis
- Interoperability between assurance and engineering activities along with external assessments and supplier assurance
- Standards, regulations, and guidelines pertaining to development, evaluation, compliance, and certification
- Case studies, empirical results, experience reports, best practices, benchmarks and reusable artifacts (documents, models, codes, etc.)

Workshop proceedings will be provided as complementary book to the SAFECOMP Proceedings in **Springer LNCS**. Please keep your paper format according to the SPRINGER LNCS style guidelines. Submitted papers must be at least 6 pages and at most 10 pages in length. **All papers will be reviewed by at least three reviewers.**

Submission will be via EasyChair: https://easychair.org/conferences/?conf=mapsod2022

Tentative Deadlines:

- **Full paper submission:** 06 May 2022
- **Notification of acceptance:** 25 May 2022
- **Camera-ready submission:** 10 June 2022
- **Workshop:** 6 September 2022

Contacts (workshop and programme committee chairpersons):

Brahim HAMID
CNRS/IRIT Laboratory
University of Toulouse 2
Toulouse, France
brahim.hamid@irit.fr

Jason JASKOLKA
Systems & Computer Engineering
Carleton University
Ottawa, Ontario, Canada
jason.jaskolka@carleton.ca

Sahar KOKALY
General Motors
Canadian Technical Center
Markham, Ontario, Canada
sahar.kokaly@gm.com