11th International Workshop on Next Generation of System Assurance Approaches for Critical Systems (SASSUR 2024)

www.sassur.org

SAFECOMP 2024, Florence, Italy, Sept. 17th, 2024

System assurance and certification are amongst the most expensive and time-consuming tasks in the engineering of critical systems, e.g., safety-critical, security-critical, privacy-critical, explainability-critical, mission-critical, and business-critical ones. Assurance can be defined as the set of planned and systematic actions necessary to provide adequate confidence and evidence that a system satisfies given requirements, e.g., for system safety or for compliance with some standards. Certification can be defined as the legal recognition that a system complies with standards and regulations designed to ensure that the system can be depended upon to deliver its intended service.

The SASSUR workshop is intended to explore **new ideas on assurance and certification of critical systems**. In particular, SASSUR will provide a forum for thematic presentations and in-depth discussions about specification, analysis, reuse, composition, and combination of assurance arguments, of assurance evidence, and of contextual information about critical products, in a way that makes assurance and certification more cost-effective, precise, and scalable.

Contributions are sought in (but are not limited to) the following **topics**:

- Assurance and certification of autonomous or adaptive systems
- Assurance for new technologies and for their application (e.g., blockchain and edge AI)
- COTS or external sourcing management of evidence in critical systems
- Cross-domain product certification
- Emergent V&V needs for assurance and certification
- Engineering processes, lifecycles, and methodologies in the context of critical systems (incl. agile ones)
- Evolution of standards and trends on regulations
- Evolutionary approaches for system assurance
- Human factors in dependability assurance
- Industrial challenges for cost-effective assurance and certification of critical systems
- Integration of process-centric and product-centric assurance
- Management of assurance evidence
- Management of compliance with standards and regulations
- Methods and techniques for artificial intelligence assurance
- Mixed-criticality system assurance
- Model-based system assurance and certification
- Multi-concern (safety, security, privacy, reliability, explainability...) system engineering and assurance
- Support for re-certification processes
- Technical debt for safety, security, privacy, etc.
- Tool support for assurance and certification

Authors are invited to submit short papers (6 pages) or full paper (max. 12 pages) in PDF format using EasyChair: https://easychair.org/conferences/?conf=sassur2024

Submissions must conform to the Springer LNCS formatting guidelines (https://www.springer.com/gp/computer-science/lncs/editor-guidelines-for-springer-proceedings). Papers will be peer-reviewed through a regular process, with at least three reviews per paper. The accepted papers will be published in the SafeComp 2024 Workshops proceedings. At least one author of each accepted paper must register to the workshop so that the paper is included in the proceedings.

Important dates:

Full paper submission: 6 May 2024
 Notification of acceptance: 27 May 2024
 Camera-ready submission: 10 June 2024

Contact (workshop organisation committee)

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