MASCA 2023:

International Workshop on Modular Argumentation to Support Device Conformity Assessment

System assurance is one of the most expensive tasks during development of critical systems. With growing complexity of the systems also related assurance tasks become more complex and time-consuming. The development and maintenance of explicit assurance cases is considered a promising approach to effectively manage the growing complexity and the increasing time-to-market pressure of critical products and services while still meeting the demanding assurance goals.

However, monolithic assurance cases can become unmanageable due to their size and complexity. They themselves need a structured and systematic approach throughout their lifetime. One way to tackle this challenge is to modularize the assurance cases. This holds regarding different views on the assurance cases (e.g., safety assurance cases vs. security assurance cases) as well as regarding system architecture and its components, for instance various hardware and software modules, sometimes provided by diverse vendors. Bringing modularity from development to certification (including the required documentation) vastly reduces the effort required and allows to re-use already proven assurance case argumentation (including the respective evidence). In this sense modular assurance is the connection of an argumentation tree (e.g., the conformity demonstration of a sub-component of a device or software) to the conformity case of the product/software to be assessed. A formalism needs to be developed for such modular "connections" or "assurance contracts" to ensure the assurance contract is valid and supports the conformity assessment case.

The MASCA workshop will focus on the security assurance of systems and on the interfaces between the modules composing the argumentation tree. The workshop will provide a forum for thematic presentations and in-depth discussions about structuring, composition, re-use, and combination of assurance arguments and assurance evidence. We plan to have an example from the medical devices domain but strongly encourage authors from other domains (such as transport, industrial automation, robotics, nuclear, defense, etc.) to submit papers and share their experiences.

Workshop proceedings will be provided as complementary book to the SAFECOMP Proceedings in Springer LNCS. All papers (6 - 12 pages) will be peer-reviewed through a regular refereeing procedure, with at least two reviewers. At least one author of each accepted paper must register to the workshop so that the paper is included in the proceedings. Please keep your paper format according to SPRINGER LNCS style guidelines (use Microsoft Word if possible) (http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0). Submission will be via EasyChair: https://easychair.org/conferences/?conf=masca2023

See also the CfP on EasyChair: https://easychair.org/cfp/masca2023

Important Dates / Deadlines:

- Full paper submission: 10 May 2023

- Notification of acceptance: 25 May 2023

- Camera-ready submission: 05 June 2023

- Workshop: 19 September 2023

The International Programme Committee is composed of selected EWICS members and experts, led by the workshop organizers.