CALL FOR TALKS

Developing self-adaptive, self-organising systems (SASO) that fulfil the requirements of different stakeholders is no simple matter. Quality assurance is required at each phase of the entire development process, starting from requirements elicitation, system architecture design, agent design, and finally in the implementation of the system. The quality of the artefacts from each development phase affects the rest of the system, since all parts are closely related to each other. Furthermore, the shift of adaption decisions from design-time to run-time – necessitated by the need of the systems to adapt to changing circumstances – makes it difficult, but even more essential, to assure high quality standards in these kind of systems. Accordingly, the analysis and evaluation of these self-* systems has to take into account the specific operational context to achieve high quality standards.

The necessity to investigate this field has already been recognized and addressed in different communities but there exists so far no platform to bring all these communities together. Therefore, the workshop will provide an open stage for discussions about the different aspects of quality assurance for self-adaptive, self-organising systems. Examples for topics of interest are:

Modelling and verification
- formal models and modelling languages such as automata, state machines, process algebras, logics, HOL, Markov-chains, UML
- run-time verification and validation in SASO systems

Empirical evaluation
- measurement and evaluation of resilience, security, performance, reliability, and cost in SASO systems
- benchmarking of SASO systems

Test-centred development
- test derivation, test selection, test coverage, test implementation and execution, test result analysis, test oracles, test management, and monitoring
- automated support of any of the testing activities, rigid testing processes, test driven development

Case studies, industrial applications, and experience reports

SUBMISSIONS

The organisers welcome the submission of proposals for talks in the two-column IEEE Computer Society Press proceedings style not exceeding two pages. We encourage the submission of talks presenting previously published work that is of special interest to the community of the workshop. Moreover, position statements encouraging discussions on the workshop’s topics are welcome. The workshop is an excellent opportunity to discuss and share research results with a wider audience in an interdisciplinary environment. Each submission will be peer-reviewed by two to three members of the program committee in a single-blind process. The decision will be based on the motivation of the research, the clarity of the claims of the contribution and the relevance of topic.

IMPORTANT DATES

Talk submission: July 11, 2015
Acceptance notification: July 17, 2015
Camera-ready version: August 10, 2015
Workshop: September 21, 2015

WEBSITE

More information can be found at http://qa4saso.isse.de

WORKSHOP ORGANIZATION

Wolfgang Reif
Augsburg University, Germany
Institute for Software & Systems Engineering
reif@isse.de

Franz Wotawa
Technical University of Graz, Austria
Institute for Software Technology
wotawa@ist.tugraz.at

Benedikt Eberhardinger
Augsburg University, Germany
Institute for Software & Systems Engineering
eberhardinger@isse.de

PROGRAM COMMITTEE

Jacob Beal (BBN Technologies, USA)
Radu Calinescu (University of York, UK)
Schahram Dustdar (Technical University Wien, AUT)
Holger Giese (Hasso-Plattner-Institut Potsdam, GER)
Sebastian Götz (Technical University Dresden, GER)
Helmut Götz (Siemens AG, GER)
Marc Harman (University College London, UK)
Paola Inverardi (University of L’Aquila, ITA)
Alexander Knapp (University of Augsburg, GER)
Cu D. Nguyen (University of Luxembourg, LUX)
Hella Seebach (University of Augsburg, GER)
Sven Tomforde (University of Augsburg, GER)

PAPER FORMAT

Maximum of 2 pages, formatted according to the IEEE Computer Society Press proceedings style guide.