SASO^ST 2014

Second International Workshop on Self-Adaptive and Self-Organising Socio-Technical Systems

at the 8th IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO)
London, UK, September 12th, 2014

Call for Talks

The design and operation of computer systems has traditionally been driven by technical aspects and considerations. However, the usage characteristics of information and communication systems are both implicitly and explicitly determined by social interaction and the social graph of users. This aspect is becoming more and more evident with the increasing popularity of social network applications on the internet. This workshop will address all aspects of self-adaptive and self-organising mechanisms in socio-technical systems, covering different perspectives of this exciting research area ranging from normative and trust management systems to socio-inspired design strategies for distributed algorithms, collaboration platforms and communication protocols.

Topic Areas

SASO^ST systems require a highly interdisciplinary approach, and the establishment of a research community around the creation of such systems is one of the workshop's key objectives. For this purpose, the workshop brings together experts from areas such as distributed computer systems, complex systems and the social sciences to present findings and elaborate on the topic in the following complementary topical sections as well as open panel discussion rounds. Relevant topics include but are not limited to:

[Laws, norms, and policies in self-organising socio-technical systems]
- Self-organising norm-governed and contract-based systems
- Self-organising and evidence-based policies
- Computational justice
- Representation of and reasoning about computational laws
- Games with mutable rules

[Trust in self-organising and autonomous systems]
- Trust and reputation management in autonomous self-organising systems
- Metrics of trust and specialised metrics for single trust facets
- Policies and their influence on trustworthiness
- Formal methods to analyse, prove, or measure aspects of trust
- Evaluations of the effects of trust in self-organising and autonomous systems
- Analysis of threats to self-organising and autonomous systems
- Transparency and controllability of self-organisation processes and autonomous decisions
- Trust-based algorithms, decisions and game theory to deal with uncertainty in self-organising systems

[Socially adaptive and socio-aware information and communication systems]
- Socio-aware overlay topologies
- Analysis, modelling and control of information spreading, opinion formation phenomena and collective user behaviour in online social networks and distributed computer systems
- Socially adaptive, scalable content distribution
- Real-time monitoring and prediction of collective user dynamics
- Social adaptation of network protocols and topologies
- Simulation and evaluation of interactive networked computing systems with socio-aware behavioural models
- Utilisation of social structures for the scalable provision of distributed virtual environments and in application-level routing schemes for Peer-to-Peer, wireless ad-hoc or delay tolerant networks
- Socially-inspired algorithms and network topologies for distributed search, consensus, gossiping etc.

Organizers

Gerrit Anders
University of Augsburg, Germany
anders@informatik.uni-augsburg.de

Jean Botev
University of Luxembourg, Luxembourg
jean.botev@uni.lu

Markus Esch
Fraunhofer FKIE, Germany
markus.esch@fkie.fraunhofer.de

Paper Submission

The organizers 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 the research to the domain of self-adaptive and self-organising socio-technical systems. In particular, submissions that promise to fuel discussions, which bring together results and issues from different disciplines and which thus contribute to the strengthening of an interdisciplinary community will be given preference.

Contact

For more information please visit **http://sasost.isse.de** or contact any of the organizers.