

SASOST 2017

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

*at the 11th IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO),
part of FAS* - Foundations and Applications of Self* Systems Conferences
Tucson, Arizona, USA, September 18-22, 2017*

Call for Contributions

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 social aspects that influence the design of technical systems, covering different perspectives of this exciting research area from the computational modelling of social systems to socio-inspired design strategies for distributed algorithms, collaboration platforms and communication protocols.

Topic Areas

SASOST 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:

Computational modelling of social systems

- Trust, norms and reputation management
- Computational social science techniques
- Social network analysis in information systems and collaboration platforms
- Information spreading, opinion formation and collective user behaviour
- Real-time prediction of collective phenomena like, e.g., information cascades in social media
- Representation of and reasoning about computational laws
- Effects of trust models and metrics on self-organising autonomous systems
- Analysis of threats to self-organising and autonomous systems
- Data-driven modelling of human and social aspects in software engineering

Applications of social aspects in technical systems

- Socio-aware overlays and adaptation of network protocols and topologies
- Simulation and evaluation of computing systems using behavioural models
- Trust-based approaches to deal with uncertainty in self-organising systems
- Self-organising norm-governed systems
- Socially adaptive, scalable content distribution
- Real-time monitoring and prediction of collective user dynamics
- Smart grids and cyber-physical systems
- 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.

Important Dates

Submission Deadline:	July 12, 2017
Acceptance Notification:	July 21, 2017
Camera-ready Deadline:	July 26, 2017
Workshop:	Sept. 18 or 22, 2017

Organizers

Jean Botev

University of Luxembourg, Luxembourg

Markus Esch

University of Applied Science Saarbrücken, Germany

Ingo Scholtes

ETH Zürich, Switzerland

Submission

The organisers welcome the submission of **short papers** not exceeding 6 two-column pages in the IEEE Computer Society Press proceedings style. We solicit both original research papers as well as position papers. The submissions need to be previously unpublished and currently not under review elsewhere.

Furthermore, we encourage the submission of **proposals for talks** that present previously published work of special interest to the workshop community. Position statements encouraging discussions on the workshop's topics are also welcome. These proposals should also adhere to the two-column IEEE Computer Society Press proceedings style, not exceeding two pages. The workshop provides 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 programme committee in a single-blind process. The decision will be based on the motivation of the research, the clarity 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.

Accepted papers will be published as a bundle with the main conference proceedings by IEEE Computer Society Press. Content will be submitted to the indexing companies for possible indexing.

Contact

For more information visit sasost.socioaware.net or contact us via email: sasost.workshop@socioaware.net