The 11th IEEE International Conference on Self-adaptive and Self-organizing Systems

Call for Papers

University of Arizona, Tucson, Arizona, USA – 18th - 22nd September 2017

Aims & Scope

The aim of the Self-Adaptive and Self-Organizing Systems conference series (SASO) is to provide a forum for the presentation and discussion of research on the foundations of engineered systems that self-adapt and self-organize.

SASO is an interdisciplinary meeting, where contributions from participants with different backgrounds leads to the fostering of a cross-pollination of ideas, and where innovative theories, frameworks, methodologies, tools, and applications can emerge.

Now in its 11th year, SASO embraces this inter-disciplinary nature, and welcomes novel contributions to both the foundational and application-focused dimensions of self-adaptive and self-organizing systems research.

JR P (https://flic.kr/p/7EkTw6)

The proceedings will be published by the IEEE and made available as a part of the IEEE Digital Library. Full CfP and more details at `https://saso2017.telecom-paristech.fr`.

Part of Foundations and Applications of Self-* Systems 2017 (FAS*17). `http://fas-star.org/`

Topics

Topics of interest include, but are not limited to:

- Systems theory: nature-inspired & socially-inspired paradigms and heuristics; inter-operation of self-* mechanisms; theoretical frameworks; control theory;
- System properties: robustness; resilience; stability; anti-fragility; diversity; self-reference, reflection; emergence; computational (self-)awareness;
- Systems engineering: reusable mechanisms & algorithms; patterns; architectures; methodologies; middleware; platforms and toolkits; multi-agent systems;
- Theory and practice of organization: self-governance, change management, electronic institutions, distributed consensus, commons, knowledge management, and the general use of rules, policies, etc. in self-* systems
- Theory and practice of adaptation: mechanisms for adaptation, including evolution, logic, learning; adaptability, plasticity, flexibility
- Socio-technical systems: human & social factors; visualization; crowdsourcing / collective awareness; humans-in-the-loop; humanities in self-* systems;
- Data-driven approaches: data mining; machine learning; data science and other statistical techniques to analyze, understand, and manage system behavior;
- Self-adaptive and self-organizing hardware: self-* materials; self-construction; reconfigurable hardware;
- Education: experience reports; curricula; innovative course concepts; methodological aspects;

Applications

Work in the following domains is particularly welcome:

- Smart systems: smart grids, cities, environments, homes, etc.
- Industry: embedded self-* systems, adaptive industrial plants, Industry 4.0
- Transportation: autonomous vehicles, traffic optimization
- Autonomous systems: aerial vehicles, undersea vehicles, autonomous robotics
- Internet of Things: self-* networks, self-* security

Important Dates

- Abstract submission: May 1, 2017
- Paper submission: May 10, 2017
- Notification: June 30, 2017
- Camera ready due: July 12, 2017
- SASO: September 18-22, 2017

Organization Team

Conference General Chair:

- Ada Diaconescu, Telecom Paris-Tech, France

SASO Steering Committee Chair:

- Jan-Philipp Steghöfer, Chalmers | University of Gothenburg, Sweden

Program Chairs:

- Peter Lewis, Aston University, UK
- Sam Malek, University of California Irvine, USA
- Hella Seebach, Augsburg University, Germany

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