

SEAMS 2016

May 16-17, 2016

Austin, Texas

CALL FOR PAPERS

11TH INTERNATIONAL SYMPOSIUM ON SOFTWARE ENGINEERING FOR ADAPTIVE AND SELF-MANAGING SYSTEMS

<http://seams2016.jgreen.de/>

Self-adaptation and self-management are key requirements in many modern and emerging software systems, including the industrial internet of things, cyber-physical systems, cloud computing, and mobile computing. These systems must be able to adapt themselves at run time to preserve their operation in the presence of uncertain changes in their operating environment, resource variability, new user needs, intrusions, and faults.

Solutions to complement software systems with self-managing and self-adaptive capabilities have been proposed by researchers from different areas including software architecture, fault-tolerant computing, programming languages, robotics, and run-time program analysis and verification. Additionally, solutions have been proposed in related areas like biologically-inspired computing, artificial intelligence, machine learning, control systems, and agent-based systems. The SEAMS symposium focuses on applying software engineering to these solutions, including methods, techniques, and tools that can be used to support self-* properties like self-adaptation, self-management, self-healing, self-optimization, and self-configuration.

The objective of SEAMS is to bring together researchers and practitioners from many of these diverse areas to investigate, discuss, and examine thoroughly the fundamental principles, state of the art, and critical challenges of engineering self-adaptive and self-managing systems.

We welcome submissions on all topics related to engineering of self-*systems, including:

- Foundational concepts (self-* properties, feedback control, algorithms, etc.)
- Languages (formal notations, programming languages, etc.)
- Constructive Methods (requirements elicitation, reuse support, architecture, etc.)
- Analytical Methods for Self-Adaptation and Management (evaluation, verification, etc.)
- Application Areas (internet of things, cyber-physical systems, cloud computing, etc.)
- Artifacts and Evaluation (model problems, exemplars, resources, metrics, etc.)

Submissions

- **Long papers** (10 pages + 2 reference). Long papers should clearly describe innovative and original research or explain how existing techniques have been applied to real-world examples.
- **Position papers for new ideas** (6 pages + 1 reference). Position papers should describe novel and promising ideas and/or techniques that may not be fully validated.
- **Artifact papers** (6 pages + 1 reference). Artifact papers must describe why and how the accompanying artifact may be useful for the broader community.

All accepted contributions will be published in the ACM and IEEE digital library.

After the symposium, a set of selected papers will be invited to submit to the ACM Transactions on Autonomous and Adaptive Systems (TAAS).

Important Dates

Abstract deadline	9 January, 2016
Submission deadline	16 January, 2016
Notification deadline	18 February, 2016

Collocated with



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Politecnico di Milano, Italy

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University of California, Irvine, USA

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