SEAMS 2020

15TH INTERNATIONAL SYMPOSIUM ON SOFTWARE ENGINEERING FOR ADAPTIVE AND SELF-MANAGING SYSTEMS



CALL FOR PAPERS

Modern and emerging software systems ranging from industrial Internet of Things and Cyber-Physical Systems to cloud and edge computing, robotics, and smart environments have to operate without interruption. Self-adaptation and self-management enable these systems to adapt themselves at runtime to preserve and optimize their operation in the presence of uncertain changes in their operating environment, resource variability, new user needs, attacks, intrusions, and faults.

TOPICS OF INTEREST

All topics related to engineering self-adaptive and self-managing systems, including:

- Foundational Concepts
- Engineering Strategies
- Engineering Activities
- Languages
- Application Areas
- Artifacts & Evaluation

IMPORTANT DATES

Abstract submission: 10 January 2020

Paper submission: 17 January 2020

Author notification: 2 March 2020

Camera ready: 16 March 2020

SUBMISSION SITES

For Research, NIER, Experience, Demo, Doctoral Project, and Special Session papers: https://easychair.org/conferences/?conf=seams2020

For Artifact papers:

http://easychair.org/conferences/?conf=seams2020artifact





SCOPE

Approaches to augment software and software-controlled systems with self-managing and self-adaptive capabilities are an important area of research and development, offering solutions that leverage advances in fields such as software architecture, fault-tolerant computing, programming languages, run-time program analysis and verification, among others. Additionally, research in this field is informed by related areas such as control systems, machine learning, artificial intelligence, agent-based systems, and biologically inspired computing. The SEAMS symposium focuses on applying software engineering to these approaches, including methods, techniques, processes and tools that can be used to support self-* properties like self-protection, self-healing, self-optimization, and self-configuration.

The objective of SEAMS is to bring together researchers and practitioners from academia, industry and government, to investigate, discuss, examine and advance the fundamental principles, the state of the art, and the solutions addressing critical challenges of engineering self-adaptive and self-managing systems.

PAPER SUBMISSION DETAILS AND REVIEW PROCESS

All submitted papers and artifacts will be reviewed by at least three members of the program committee. Papers must not have been previously published or concurrently submitted elsewhere. Papers must be submitted via EasyChair. Formatting instructions are available at https://www.acm.org/publications/proceedings-template for both LaTeX and Word users. LaTeX users must use the provided acmart.cls and ACM-Reference-Format.bst without modification, enable the conference format in the preamble of the document (i.e., \documentclass[sigconf,review]{acmart}), and use the ACM reference format for the bibliography (i.e., \bibliographystyle{ACM-Reference-Format}). The review option adds line numbers, thereby allowing referees to refer to specific lines in their comments.

Accepted papers will appear in the symposium proceedings, which will be published in the ACM and IEEE digital libraries. The official publication date of an accepted paper will be the date the proceedings are made available in the ACM Digital Library. This date may be up to two weeks prior to the first day of ICSE 2020. The official publication date affects the deadline for any patent filings related to published work. Purchases of additional pages in the proceedings is not possible.

TYPES OF PAPERS

SEAMS 2020 solicits the following types of papers:

- Technical papers (10 pages main text, inclusive of figures, tables, appendices, etc.; plus references up to two additional pages).
- New Ideas and Emergent Results (NIER) papers (6 pages + 1 page references).
- Experience papers (6 pages + 1 page references).
- Artifact papers (6 pages + 1 page references).
- Demo papers (6 pages + 1 page references).
- Doctoral project papers (4 pages + 1 page references).
- Special session papers on ethical concerns of self-adaptive systems (2 pages including references).

General Chair

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