SEAMS 2017 (The 12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems)

Welcome

Self-adaptation and self-management are key objectives 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 and optimize their operation in the presence of uncertain changes in their operating environment, resource variability, new user needs, attacks, intrusions, and faults.

Approaches to complement software-based 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, robotics, and run-time program analysis and verification. Additionally, research in this field is informed by 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 approaches, 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 diverse areas to investigate, discuss, and examine the fundamental principles, state of the art, and critical challenges of engineering self-adaptive and self-managing systems.