Welcome to the 8th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS’13), held in San Francisco during May 20-21 2013, in conjunction with the 35th International Conference on Software Engineering (ICSE’13).

SEAMS is the leading international forum for presenting and discussing novel ideas, innovations, trends and experiences in engineering software with self-managing and self-adaptation features. These key features enable software systems to adapt at run-time so they can cope with uncertainty. This uncertainty may be due to changes in their operational environment, variability of resources, new user needs, intrusions, and faults.

Solutions to complementing software systems with self-managing and self-adaptive capabilities have been proposed by researchers in many different areas, including software architecture, fault-tolerant computing, robotics, control systems, programming languages, run-time program analysis and verification, and biologically-inspired computing. This symposium focuses on software engineering aspects, covering methods, techniques, and tools that support the design and runtime operation of self-adaptive, self-protecting, self-healing, self-optimizing, and self-configuring software systems.

The symposium’s objective is to bring together researchers and practitioners from many of the diverse areas that have an interest in adaptive software to investigate, discuss, and examine thoroughly the fundamental principles, state of the art, and critical challenges of self-adaptive and self-managing systems.

We are delighted to have two outstanding keynote speakers at SEAMS’13. David Garlan (Carnegie-Mellon University) is a prominent member of the SE community, and a co-founder of the adaptive software systems community. David has made seminal contributions over more than two decades in core areas of SE and Computer Science, including software architectures, pervasive and ubiquitous computing, as well as adaptive software systems. Joseph L. Hellerstein (Google, Inc.) is a leading advocate of exploiting control theoretic techniques to build adaptive network, system and service management systems. Dr. Joseph Hellerstein manages the Computational Discovery Department at Google Inc. in Seattle, WA. He was a Principal Architect at Microsoft Corp. in Redmond, WA
from 2006 to 2008, and a researcher and senior manager at the IBM Thomas J. Watson Research Center in Hawthorne, NY (USA) from 1984 to 2006.

In addition to the keynotes, the program includes six research paper sessions showcasing ground-breaking research on the emerging discipline of adaptive software systems. The 19 accepted papers were selected from 68 submissions (for a 28% acceptance rate). Each paper was carefully reviewed by at least three programme committee members. The symposium programme covers the following topics: Evaluation, Services, Learning and updates, Case studies and decision-making, Qualities, and Evolution.

For the first time for SEAMS symposia, research submissions were classified by their authors into one of four categories: formal and/or technical, evaluation, experience or exploratory. These categories are intended to guide authors to better define the nature of the contribution of their work, but also to circumscribe reviewer expectations. For instance, a technical paper is expected to be strong on originality, but not necessarily so on evaluation, while for an evaluation paper the importance of originality vs. evaluation is reversed.

The SEAMS'13 symposium would not have been possible without the dedication of many colleagues who contributed their time, energy and expertise to serve on the organizing and programme committees. We extend our heartfelt thanks to each and every one of them.

Finally, we trust that all those who attend SEAMS'13 will enjoy other collocated events, as well as ICSE, and hope that they will also find the time to enjoy San Francisco.

John Mylopoulos, SEAMS'13 Programme Chair
Marin Litoiu, SEAMS'13 General Chair
Mike Smit, SEAMS'13 Publicity Chair