



# CALL FOR PAPERS

## Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2008)

May 12-13, 2008, Leipzig, Germany

<http://www.hpi.uni-potsdam.de/giese/seams2008>

### Theme

An increasingly important requirement for software-intensive systems is the ability to self-manage by adapting at run time to handle such things as resource variability, changing user needs, and system intrusions or faults. Such a system must configure and reconfigure itself, continually tune and optimize itself, protect and recover itself, while keeping its complexity hidden from the user.

The topic of self-adaptive and self-managing systems has been studied in a large number of specific application areas, including autonomic computing, robotics, control systems, programming languages, software architectures, fault-tolerant computing, and biological computing. The goal of this symposium is to bring together researchers and practitioners from many of these diverse areas to discuss the fundamental principles, state of the art, and critical challenges of self-adaptive and self-managing systems. Specifically, we intend to focus on the software engineering aspects, including the methods, architectures, algorithms, techniques and tools that can be used to support dynamic adaptive and self-managing behavior.

### Topics of Interest

We are interested in submissions from both industry and academia on all topics related to this important area. These topics include, but are not limited to:

- design and architectural language support for the self-adaptation of software;
- algorithms for software self-management;
- integration mechanisms for self-adaptive and self-managing systems;
- formal notations for modeling and analysis of software self-adaptation;
- architecture patterns for supporting self-adaptation;
- verification and validation of self-managing software;
- methods for engineering user-trust of self-managing systems;
- methods to instrument existing systems to observe self-managing behaviour over long periods of time;
- adaptive components;
- evaluation and assurance for self-adaptive systems;
- decision algorithms for self-adaptive systems.

The following application areas are of particular interest: autonomic computing; logging and diagnostics; mobile computing; dependable computing; autonomous robotics; adaptable user interfaces; service-oriented architectures.

### Paper Submission Details

We are soliciting both research papers and experience reports that concisely describe ongoing work, new ideas, experiences, etc. All submitted papers will be reviewed by at least three program committee members. Papers must not have been previously published or concurrently submitted elsewhere. For submission instruction, check the workshop web site: <http://www.hpi.uni-potsdam.de/giese/seams2008>. The accepted papers will be published in the ACM and IEEE digital libraries and in formal SEAMS 2008 proceedings. Please see ICSE 2008 workshop guidelines for length and format of papers.

### Important Dates

Submission deadline: January 28, 2008  
Author notification: February 11, 2008  
Camera ready copy: February 21, 2008

### Organizing Committee

Betty Cheng, Michigan State University, USA  
Rogério de Lemos, University of Kent, UK  
David Garlan, Carnegie Mellon University, USA  
Holger Giese, Hasso Plattner Institut, Germany  
Marin Litoiu, IBM Toronto, Canada  
Jeff Magee, Imperial College, UK  
Hausi Müller, University of Victoria, Canada  
Richard Taylor, Univ. of California, Irvine, USA

### Program Committee

Jo Atlee, University of Waterloo, Canada  
Betty Cheng, Michigan State University, USA  
Rogério de Lemos, University of Kent, UK  
Anthony Finkelstein, UCL, UK  
Cristina Gacek, University of Newcastle upon Tyne, UK  
David Garlan, Carnegie Mellon University, USA  
Holger Giese, Hasso Plattner Institut, Germany  
Karl Goeschka, Vienna University of Technology, Austria  
Hassan Gomma, George Mason University, USA  
Ethan Hadar, CA, Israel  
Paola Inverardi, University of Aquila, Italy  
Gail Kaiser, Columbia University, USA  
Marin Litoiu, IBM Toronto, Canada  
Jeff Magee, Imperial College, UK  
Pat Martin, Queen's University, Canada  
Neno Medvidovic, University of Southern California, USA  
Hausi Müller, University of Victoria, Canada  
John Mylopoulos, University of Toronto, Canada and University of Trento, Italy  
Masoud Sadjadi, Florida International University, USA  
Dennis Smith, SEI, USA  
Roy Sterritt, University of Ulster, UK  
John Strassner, Motorola Research Labs, USA  
Richard Taylor, University of California, Irvine, USA

