Quality of Software Architecture

Prague, Czech Republic, June 23 – 25, 2010

QoSA 2010 http://gosa.ipd.kit.edu/gosa 2010/

Important dates:

Submission of papers: February 19, 2010 Notification of acceptance: March 19, 2010 Camera-ready paper due: April 10, 2010

Organization:

Program Chairs:

George Heineman Worcester Polytechnic Institute, USA Jan Kofron Charles University, Prague, Czech Republic

General Chair:

Frantisek Plasil Charles University, Prague, Czech Republic

Program Committee:

Danilo Ardagna, Italy Colin Atkinson, Germany Muhammad Ali Babar, Ireland Len Bass, USA Steffen Becker, Germany Jan Bosch, USA Ivica Crnkovic, Sweden Rogerio De Lemos, United Kingdom Antinisca Di Marco, Italy Anirüddhā Gokhālé, USA Vincenzo Grassi, Italy Jens Happe, Germany Darko Huljenic, Croatia Samuel Kounev, Germany Heiko Koziolek, Germany José Merseguer, Spain Robert Nord, USA Boyana, Norris, USA Dorina Petriu, Canada Frantisek Plasil, Czech Republic Marek Prochazka, The Netherlands Sasikumar Punnekkat, Sweden Roshanak Roshandel, USA Antonino Sabetta, Italy Raghu Sangwan, USA Jean-Guy Schneider, Australia Judith Stafford, USA Clemens Szyperski, USA Petr Tuma, Czech Republic Hans van Vliet, The Netherlands Michel Wermelinger, United Kingdom lan Gorton, USA Raffaela Mirandola, Italy Carlo Ghezzi, Italy Ralf Reussner, Germany Sven Overhage, Germany Wolfgang Weck, Switzerland

Call for Papers "Research into Practice – Reality and Gaps"

The goal of QoSA (Quality of Software Architectures) is to address aspects of software architecture focusing broadly on quality characteristics and how these relate to the design of software architectures. Specific issues of interest are defining quality measures, evaluating and managing architecture quality, linking architecture to requirements and implementation, and preserving architecture quality throughout the lifetime of the system. In this, the sixth incarnation of QoSA, we expect researchers will be able to demonstrate how specific sub-elements within an architecture lead to measurable quality in the implemented system. At the same time, we also expect there will be clear challenges that remain to be resolved. For QoSA 2010 the theme this year is "Research into Practice – Reality and Gaps". Technical reports both on scientific novel results and industrial case studies are welcome.

Conference Topics

Topics of interest include, but are not limited to:

Architecture Design and Implementation:

- design decisions and their influence on the quality of software architecture
- architectural patterns and their quality impacts
- architectural standards and reference architectures
- model-driven architecture (MDA) and quality aspects
- relationship between quality attributes and architectural design properties

Architecture Evaluation:

- lessons learned and empirical validation of theories and frameworks on architecture quality
- empirical validation of testing, prototyping, simulation for assessing architecture quality
- models and specification techniques to evaluate quality
- attributes of software architectures
- languages for architectural modeling that allow the evaluation of quality characteristics
- · processes for evaluating architecture quality
- evaluating the effects of architectural adaptations at run-time
- applications on industrial case studies and use cases

Architecture Management:

- coordination of business architecture, business processes, and software architecture
- assessment and enforcement of architectural conformance, especially in the face of run-time adaptation
- traceability of software architecture to requirements and implementation
- integration of heterogeneous software architectures
- architecture evolution and architecture governance
- architectural models at run-time

Application Domains:

- component-based and service-oriented systems
- software product-lines
- pervasive and autonomic systems
- industrial control systems

Manuscript guidelines and publication

Accepted contributions will be published in a volume of the *Springer Lecture Notes in Computer Science* series. Papers should not exceed **16 pages**, must be written in English, and prepared according to Springer's **LNCS style** (guidelines are available at: <u>www.springer.de/comp/lncs/authors.html</u>). Papers must not have been previously published or submitted elsewhere. If accepted, the paper must be personally presented at the QoSA 2010 Conference by one of the authors. Manuscripts must be submitted through the submission system available online at <u>www.easychair.org/conferences/?conf=qosa2010</u>.