



QoSA 2015

Software Architecture for the 4th Industrial Revolution

11th International Conference on the Quality of Software Architectures

May 4-8, 2015
Montreal, QC, Canada
in conjunction with CBSE 2015 and
WICSA 2015 as Federated Events of

Program Committee Chairs
Ipek Ozkaya **Heiko Koziolk**
Software Engineering ABB Corporate
Institute (SEI), USA Research, Germany

CompArch 2015
General Chair: Philippe Kruchten
University of British Columbia, Canada

Paper submission deadline:
January 9, 2015
Research papers: up to 10 pages
Position papers: up to 6 pages

Motivation

The goal of QoSA (Quality of Software Architectures) is to address the quality aspects of software architecture, focusing broadly on its quality characteristics and how these relate to the design of software architectures. Specific issues of interest are defining and modeling quality measures, evaluating and managing architecture quality, linking architecture to requirements and implementation, and preserving architecture quality throughout the system lifetime.

This year the main theme of QoSA is “Software Architecture for the 4th Industrial Revolution”. After mechanization, mass production, and electronics, the Internet is about to enable a new level of productivity in manufacturing. This shall be enabled by smart cyber-physical systems connected to cloud computing services and communicating using standardized semantics. In the near future, industrial big data analytics on monitored sensor data shall improve the efficiency and individualization of production facilities. The IT and cyber-physical systems for this 4th Industrial Revolution will be partially self-adaptive and may require novel approaches for software design and architecting with new quality design and analysis challenges.



In this year's QoSA we particularly solicit contributions that explore the various implications of this upcoming industrial revolution on software architecture. This includes reference architectures, software architectures adapting at run time, architecture styles and patterns for cyber-physical and distributed systems, as well as approaches exploring critical quality properties, such as performance, reliability, security, safety, maintainability, and usability. At the same time, submissions related to the general topic of the conference are welcome.

For more information:
http://qosa.ipd.kit.edu/qosa_2015/



Montreal, Canada