

Co-located with the 10th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2015)

# BERGAMO, ITALY SEPTEMBER 1<sup>ST</sup> 2015

http://qudos2015.fortiss.org/

## **IMPORTANT DATES**

ABSTRACT SUBMISSION DEADLINE: PAPER SUBMISSION DEADLINE:

May 25, 2015 May 28, 2015 PAPER NOTIFICATION: WORKSHOP DATE:

June 29, 2015 September 1, 2015

## **SCOPE AND TOPICS**

DevOps has emerged in recent years as a set of principles and practices for smoothing out the gap between development and operations, thus enabling faster release cycles for complex IT services. Common tools and methods used in DevOps include infrastructure as code, automation through deep modeling of systems, continuous deployment, and continuous integration. As of today, software engineering research has mainly explored these problems from a functional perspective, trying to increase the benefits and generality of these methods for the end users. However, this has left behind the definition of methods and tools for DevOps to assess predict and verify quality dimensions.

The QUDOS workshop focuses on the problem of how to best define and integrate quality assurance methods and tools in DevOps. Quality covers a broadly-defined set of dimensions including performance, reliability, safety, survivability, cost of ownership, among others. To answer this question, the QUDOS workshop wants to bring together experts from academia and industry working in areas such as quality assurance, agile software engineering, and model-based development. The goal is to identify and disseminate novel quality-aware approaches to DevOps. Topics of interest include, but are not limited to:

- Foundations of quality assurance in DevOps: Methodologies; Integration with life-cycle management; Automated tool chains, Architecture patterns; etc
- Quality assurance in the development phase: Software models in early software development phases; Languages, annotations and profiles for quality assurance; Quality analysis and prediction; Optimization-based architecture design; Architectural improvements; Performance antipattern detection; Traceability and versioning; Software regression and testing; Performance change detection; etc.
- Quality assurance during operation: Application performance monitoring;
   Model-driven performance measurement and benchmarking;
   Feedback-based quality assurance;
   Capacity planning and forecasting;
   etc.
- Applications of DevOps: Case studies in cloud computing, big data, and smart cyber-physical systems; Standardization and interoperability; Novel application domains.
- All other topics related to quality-aware DevOps

#### ORGANIZING COMMITEE

## WORKSHOP CHAIRS

Danilo Ardagna, Politecnico di Milano, Italy Andreas Brunnert, fortiss GmbH, Germany Giuliano Casale, Imperial College London, UK André van Hoorn, University of Stuttgart, Germany

## PROGRAM COMMITTEE

Varsha Apte, IIT Bombay, India
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Catia Trubiani, Gran Sasso Science Institute, Italy Petr Tuma, Charles University of Prague, Czech Republic Liming Zhu, NICTA, Australia

## **SUBMISSION GUIDELINES**

Authors are invited to submit original, unpublished papers that are not being considered in another forum. We solicit full papers (max 6 pages), short tool papers (max 2 pages) and extended abstracts overviewing a related project (max 1 pages). A special session will be organised to showcase project posters for the extended abstracts.

Papers will be published in the ESEC/FSE 2015 proceedings by ACM and included in the ACM Digital Library.

### **SPONSORS**







