

Workshop on Continuous Software Engineering

Horst Lichter¹, Bernd Brügge², Dirk Riehle³

¹RWTH Aachen University, Research Group Software Construction
horst.lichter@swc.rwth-aachen.de

²Technische Universität München, Institut für Informatik / IIT
bruegge@in.tum.de

³Friedrich-Alexander-University Erlangen-Nürnberg, Open Source Research Group
dirk.riehle@fau.de

In order to develop and deliver high-quality products to their customers, software companies have to adopt state-of-the-art software development processes. To face this challenge, companies are applying innovative methods, approaches and techniques like agile methods, DevOps, Continuous Delivery, test automation, infrastructure as code or container-based virtualization.

These new approaches have a high impact on the specification, design, development, maintenance, operation and the evolution of software systems. Therefore, common software engineering activities, organizational forms and processes have to be questioned, adapted and extended to ensure continuous and unobstructed software development (Continuous Software Engineering). So far, there is a lack of systematic approaches to face these challenges.

The goal of this workshop is to present and discuss innovative solutions, ideas and experiences in the area of Continuous Software Engineering (CSE).

The workshop aims to cover the following topics:

- DevOps & Release Engineering
- Approaches to Continuous Integration/Delivery/Deployment
- Infrastructure as Code
- Test Automation & Optimization
- Monitoring & Performance
- Security for DevOps
- Provisioning of Software & Infrastructure
- Application Virtualization with Container
- Engineering of Deployment Pipelines
- Quality & Metrics for DevOps

Copyright © 2016 for the individual papers by the papers' authors. Copying permitted for private and academic purposes. This volume is published and copyrighted by its editors.

- Design for Scalability
- Organizational issues for CSE
- Continuous Delivery for Requirements Engineering/Early Prototyping
- Change Management - Handling user feed-back
- Teaching CSE approaches
- Software Architectures for CSE
- Microservices
- Software Development Lifecycle for CSE.

As we want to have contributions from industry and academia presented and discussed in the workshop, we asked for original and evaluated research as well as for papers describing novel ideas, identified challenges, and especially experience reports related to the workshop's theme.

The presented papers cover different topics of CSE like dedicated process models and their application in CSE, new architectural styles like microservices and their integration with existing methodologies, and approaches to improve DevOps in organizations.

Program Committee

Bernd Brügge	TU München
Willi Hasselbring	Universität Kiel
Martin Jung	develop group, Erlangen
Stephan Krusche	TU München
Horst Lichter	RWTH Aachen University
Christian Nester	Google Inc.
Dirk Riehle	FAU Nürnberg
Heinz-Josef Schlebusch	Kisters AG, Aachen
Christian Uhl	codecentric AG, Düsseldorf
Stefan Wagner	Universität Stuttgart
Heinz Züllighoven	WPS und Universität Hamburg

Workshop Organizers

Lukas Alperowitz	TU München
Andreas Steffens	RWTH Aachen University