Workshop on Continuous Software Engineering

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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 Soft-ware & Infrastructure
- Application Virtualization with Container
- Engineering of Deployment Pipelines
- Quality & Metrics for DevOps
- Design for Scalability
- Organizational issues for CSE

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• Continuous Delivery for Requirements Engineering/Early Proto-typing
• 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.

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