Lecture Notes in Business Information Processing

269

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Software Quality

Complexity and Challenges of Software Engineering in Emerging Technologies

9th International Conference, SWQD 2017 Vienna, Austria, January 17–20, 2017 Proceedings



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Message from the General Chair

The Software Quality Days (SWQD) conference and tools fair started in 2009 and has grown to be the biggest conference on software quality in Europe with a strong community. The program of the SWQD conference is designed to encompass a stimulating mixture of practical presentations and new research topics in scientific presentations as well as tutorials and an exhibition area for tool vendors and other organizations in the area of software quality.

This professional symposium and conference offer a range of comprehensive and valuable opportunities for advanced professional training, new ideas, and networking with a series of keynote speeches, professional lectures, exhibits, and tutorials.

The SWQD conference is suitable for anyone with an interest in software quality, such as software process and quality managers, test managers, software testers, product managers, agile masters, project managers, software architects, software designers, requirements engineers, user interface designers, software developers, IT managers, release managers, development managers, application managers, and those in similar roles.

January 2017

Johannes Bergsmann

Message from the Scientific Program Chair

The 9th Software Quality Days (SWQD) conference and tools fair brought together researchers and practitioners from business, industry, and academia working on quality assurance and quality management for software engineering and information technology. The SWQD conference is one of the largest software quality conferences in Europe.

Over the past years, a growing number of scientific contributions were submitted to the SWQD symposium. Starting in 2012 the SWQD symposium included a dedicated scientific program published in scientific proceedings. For the sixth year we received an overall number of 21 high-quality submissions from researchers across Europe, which were each peer-reviewed by three or more reviewers. Out of these submissions, the editors selected four contributions as full papers, yielding an acceptance rate of 19 %. A further seven short papers, representing promising research directions, were accepted to spark discussions between researchers and practitioners at the conference.

Main topics from academia and industry focused on systems and software quality management methods, improvements of software development methods and processes, latest trends and emerging topics in software quality, and testing and software quality assurance.

This book is structured according to the sessions of the scientific program following the guiding conference topic "Complexity and Challenges of Software Engineering in Emerging Technologies":

- Model-Driven Development and Configuration Management
- Software Development and Quality Assurance
- Software Quality Assurance in Industry
- Crowdsourcing in Software Engineering
- · Software Testing and Traceability
- Process Improvement

January 2017 Stefan Biffl

Organization

SWQD 2017 was organized by the Software Quality Lab GmbH and the Vienna University of Technology, Institute of Software Technology and Interactive Systems, and the Christian Doppler Laboratory "Software Engineering Integration for Flexible Automation Systems."

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SWQD 2017 established an international committee of well-known experts in software quality and process improvement to peer-review the scientific submissions.

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Contents

Keynote	
From Pair Programming to Mob Programming to Mob Architecting	3
Model-Driven Development and Configuration Management	
Traceability in a Fine Grained Software Configuration Management System Martin Eyl, Clemens Reichmann, and Klaus Müller-Glaser	15
Software Development and Quality Assurance	
From Agile Development to DevOps: Going Towards Faster Releases at High Quality – Experiences from an Industrial Context	33
Learning to Rank Extract Method Refactoring Suggestions for Long Methods	45
A Portfolio of Internal Quality Metrics for Software Architects	57
Validating Converted Java Code via Symbolic Execution	70
Software Quality Assurance in Industry	
Software Quality Assurance During Implementation: Results of a Survey in Software Houses from Germany, Austria and Switzerland	87
Crowdsourcing in Software Engineering	
Images of Enterprise Test Organizations: Factory, Center of Excellence, or Community?	105
Analysing the Quality Evolution of Open Source Software Projects Lerina Aversano, Daniela Guardabascio, and Maria Tortorella	117

XII Contents

Software Testing and Traceability

Tool Support for Change-Based Regression Testing: An Industry	
Experience Report	133
Rudolf Ramler, Christian Salomon, Georg Buchgeher, and Michael Lusser	
Challenges of Establishing Traceability in the Automotive Domain Salome Maro, Miroslaw Staron, and Jan-Philipp Steghöfer	153
Process Improvement	
Towards the Automation of the Travel Management Procedure of an Italian	
Public Administration	175
Antonello Calabró, Eda Marchetti, Giorgio Oronzo Spagnolo,	
Pierangela Cempini, Luca Mancini, and Serena Paoletti	
Author Index	189