

Preface

Welcome to the First International Workshop on Evolution Support for Model-Based Development and Testing (EMDT2010), September 16, 2010, Ilmenau, Germany.

History The workshop continues a series of successful workshops on software evolution on the national level: Object-orientation, Reengineering and Architecture ORA2006 and ORA2007, Model-driven Software architecture – Evolution, Integration and Migration MSEIM 2008 and MSEIM 2009. With EMDT2010 we wanted to extend the series on an international level to integrate it with a wider community.

Motivation The growing size and complexity of modern systems is one of the major reasons for the adaptation of model-based development and testing techniques. There is an increase in academic and industrial interest in model-based and model-driven development in recent years. However, the rapid evolution of systems due to changing requirements and technological advancements is still a challenge for practitioners and researchers. The goal of this workshop is to identify the key challenges, research questions and ideas for the support of evolution in software development and testing. With EMDT2010 we intended to bring together the industrial practitioners and academic researchers to exchange their experiences and ideas.

Topics of Interest Topics of interest for the workshop include:

- Architectural design methods supporting evolution and evolvability
- Model-driven software evolution and maintenance
- Traceability from requirements models to design and test models
- Model-based reengineering and refactoring for evolution support
- Model comparison and impact analysis
- Model transformation for test generation
- Model-based testing, validation and verification
- Model-based test specification
- Test model evolution and regression testing
- Model-based test processes
- Evolution support for system management
- Tool support for model-based development and testing
- Case studies and application of model-based development and testing
- Experiences of using models and relating models with their applications in the real-world development process.

Workshop Format & Facts To enable interaction and discussion between the participants, the workshop was held in two parts. First, the full papers and invited talks were presented including a short discussion after each presentation. In the second part, short position statements were given, to initiate a focussed discussion with all attendees on key challenges, research questions and ideas for the support of evolution in software development and testing.

There were six submitted full papers. The reviewing process was performed anonymously with three peer reviews per submission. We could accept three full papers. This results in an acceptance rate of 50% for full papers for EMDT2010. Furthermore, we had one invited talk with an additional paper. Moreover, it was a great pleasure to have Prof. Bernd-Holger Schlingloff from Humboldt University, Berlin, Germany as a keynote speaker. During our workshop we had a number of 12 participants, which contributed to our discussion

Acknowledgement We would like to thank the contributors to the workshop for making this workshop possible – the authors for their submissions, the speakers for their presentations. We would like to express our special thanks to the program committee members for their extensive feedback in the reviews, which contributed to high quality level of the discussions. We also thank all participants for their comments in the discussions and the organizers of the umbrella conference IWK for their support in organizing the workshop.

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