

Modeling in Software Engineering (MiSE 09)

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Abstract

The Modeling in Software Engineering (MiSE) workshop series provides a forum for discussing the challenges associated with modeling software and with incorporating modeling practices into the software development process. The main goal is to further promote cross-fertilization between the modeling communities (e.g., MODELS) and software-engineering communities.

1. Workshop Overview

Models are an important tool in conquering the increasing complexity of modern software and software intensive systems. Therefore key industrial segments are strategically directing their developments towards intensive use of modeling techniques. This workshop aims to understand the current and future uses of models in the engineering of software and software intensive systems. The MISE-workshop series has proven to be an effective forum for discussing modeling techniques from the model-driven engineering and the software engineering perspectives. An important goal of this workshop is to foster exchange between these two communities. This year we will focus on the success of modeling in specific application domains and discuss how the experience can be carried over to other domains.

2. Workshop Description

The one and a half day workshop consists of paper presentations, discussions, and a panel presentation. The discussions will concentrate on the following research topics:

- **Model transformation:** This category will focus on techniques and tools to transform models of different abstraction layers down the implementation chain.
- **Domain specific languages.** This category contains papers focusing on design, implementation, tools, and applications for domain specific languages.
- **Verification and validation.** This topic includes formal methods for verification and validation, techniques for checking consistency of models at different abstraction layers and tools for model simulation.
- **Evolution.** Papers in this category focus on the evolution of models during the design of software systems.
- **State-of-the-art.** This category concentrates on state-of-the-art in Model Driven Engineering and future research directions. Discussions will mainly cover non-functional requirements



analysis modeling and the use of models during software execution.

- **Panel: Multi-View modeling.** The panel will discuss approaches, challenges, industrial achievements, and research directions for the use of different modeling techniques for different kinds of views on the system.

3. Workshop Structure

The workshop will be held over one and a half days, starting on the afternoon of the first day. On the first day and the start of the second day, paper presentations will be structured into sessions of thematically related papers. In order to foster lively discussions, each paper presentation will be structured as follows:

1. A 20 minute presentation by an author, summarising the key points in the paper.
2. A reaction by one of the organizers or PC members to the topic, including issues, questions or other insights.
3. A 5 minute general discussion that includes time for the author to respond to the reaction.

The lead discussants in the Multi-View Modeling panel will stimulate discussions by representing their views and raising key research questions and challenges. The following discussions will be summarized in terms of a list of most important research questions and future directions.

4. Program Committee

- Manfred Broy, TU Munich, Germany
- Alessandra Cavarra, Oxford University Computing Laboratory, UK
- Marsha Chechik, University of Toronto, Canada
- Tony Clark, Thames Valley University, UK
- Steve Easterbrook, University of Toronto, Canada
- Ludger Fiege, Siemens, Germany
- Holger Giese, University of Paderborn, Germany
- Jeff Gray, University of Alabama at Birmingham, US
- Michaela Huhn, Braunschweig University of Technology, Germany
- Awais Rashid, Lancaster University, UK
- Arnor Solberg, SINTEF, Norway