

4th Workshop on View-Based, Aspect-Oriented and Orthographic Software Modelling

2 March 2016, Karlsruhe, Germany

In Model-Driven Engineering, the functionality of complex systems lies beyond the representative capabilities of a single model. Therefore, an increasing variety of heterogeneous models and languages are used in the various phases of software development. Information about a system is consequently spread across these various models with possible overlaps, redundancies, and inconsistencies. To cope with this complexity, which normally exceeds the cognitive capacity of a single individual, various approaches have been developed to re-organize information during systems development.

Different approaches that allow system modelling from various perspectives or according to separate concerns focus on such diverse issues that it is difficult to compare and evaluate them. Some of them present solutions for a specific set of modelling languages or views, but make it hard to assess the applicability in other scenarios. Others provide means to define new views on models, but do not consider how redundancy-free models can be established.

Goal

The goal of this workshop is to bring together researchers and practitioners with an interest in model-driven software development to foster a fruitful cross-pollination of ideas between different communities dealing with the separation and integration of views, concerns, and roles in system modelling. In break-out sessions, potential topics for scientific exchange will be elicited, possible comparison criteria will be collected, and ideas for future collaborations will be discussed.

In order to provide a foundation for these discussions, we encourage submissions on new concepts, implementations or formalism as well as submissions on controversial positions, requirements for a common case-study or case-study scenarios. Submissions should contribute to investigating and discussing the benefits and drawbacks of different multi-view modelling approaches or identifying best practices.

Topics

The workshop is interested in submissions that prepare a common, multi-view modelling case study and in submissions on all topics related to model-driven development that deal with the separation and integration of different perspectives, languages, abstractions, views or concerns. More specifically, this includes:

- bridging the gap between different views or metamodels,
- generating, defining and evolving different views, models and metamodels,
- round-trip engineering and co-evolution of different models,
- composition of different views, models and metamodels,
- (bidirectional) transformations of metamodels,
- avoiding inconsistencies, overlap and redundancies between modelling artefacts,
- using role modelling concepts for model-driven engineering
- generating models and metamodels for multiple views or formalisms,
- separating and re-integrating cross-cutting concerns or model weaving,
- dynamic information hiding for partial views
- coupling of software and non-software models

Contributions

Submissions to the workshop are possible in two categories:

Research papers should describe original work on a problem or solution that pertains to the systematic separation or integration of models, concerns, views, or other modelling artefacts on six to eight pages.

Position papers should present a well-defined position on how various modelling languages, viewpoints, heterogeneous subsystems, or concerns should be handled in MDE on two to four pages.

All submissions have to adhere to the alternate ACM SIG Proceedings Style.

Organizers

Colin Atkinson, University of Mannheim, Germany

Erik Burger, Karlsruhe Institute of Technology, Karlsruhe, Germany

Thomas Goldschmidt, ABB Corporate Research, Ladenburg, Germany

Ralf Reussner, Forschungszentrum Informatik (FZI), Karlsruhe, Germany

Important Dates

Paper submission..... 10 January 2016

Author notification..... 1 February 2016

Camera-ready..... 15 February 2016

Workshop date..... 2 March 2016

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