

1st Workshop on View-Based, Aspect-Oriented and Orthographic Software Modelling

2 July 2013, Montpellier, France

In Model-Driven Software Development (MDSD), 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.

Aspect-Oriented Modelling (AOM) restructures software along cross-cutting concerns, which transgress the borders of modelling formalisms, and integrates them in a weaving or composition process. *View-based modelling* approaches address the problem with partial views that show only relevant parts of a system and offer direct editing and re-integration rather than weaving or composing. The *Orthographic Software Modeling (OSM)* approach is a view-centric development process that generates all representations of a system, from diagrams down to source code, from a single underlying model using transformations.

Goal

The goal of this workshop is to bring together researchers and practitioners with an interest in modelling complex software systems to foster a fruitful cross-pollination of ideas between the aspect-oriented community and the emerging view-based community. The workshop will comprise discussion and break-out sessions to identify commonalities and differences of the different approaches. In order to provide a foundation for these discussions, we encourage submissions on new modelling concepts as well as technical papers describing implementation approaches and formalisms.

Topics

The workshop is interested in submissions on all topics related to model-driven development processes in particular from (but not limited to) the communities of view-based, aspect-oriented and orthographic software modelling. More specifically, this includes:

- advantages and disadvantages of modelling approaches and paradigms
- constraints and limitations for the applicability of modelling paradigms
- approaches for avoiding inconsistencies, overlap and redundancies
- bridging the gap between different modelling languages or MDSD views
- generating, defining and evolving different views
- composition of different models and modelling languages
- round-trip engineering and co-evolution of different modelling languages
- generating a single metamodel for multiple views or modelling languages
- (bidirectional) transformations of metamodels
- separating and re-integrating cross-cutting concerns or model weaving
- dynamic information hiding for partial views

Contributions

Submissions to the workshop are possible in two categories:

Research papers should describe a problem or solution that occurs in MDSD and pertains to the systematic separation or integration of models, concerns, views or other modelling artefacts. A research paper has to present original work on five to eight pages and has to adhere to Springer's LNCS guidelines.

Position papers should present a well-defined position on how various modelling languages, viewpoints or heterogeneous subsystems should be handled in MDSD. A position paper has to discuss ideas for an innovative approach on two to four pages and has to adhere to Springer's LNCS guidelines.

Accepted papers will be published in the ACM Digital Library as a proceedings volume with an ISBN. The Journal of Object Technology (JOT) has agreed to publish a special issue with extended versions of a selection of the best papers.

Organizers

Colin Atkinson, University of Mannheim, Germany

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

Antonio Valecillo, Universidad de Málaga, Spain

Programme Committee

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Manuel Wimmer, Vienna University of Technology, Austria

Steffen Zschaler, King's College London, United Kingdom

Important Dates

Abstract submission..... 12 April 2013

Paper submission..... 19 April 2013

Author notification..... 15 May 2013

Camera-ready..... 7 June 2013

Workshop date..... 2 July 2013

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