MODELS 2010

ACM/IEEE 13th International Conference on Model Driven Engineering Languages and Systems
Oslo, Norway October 3–8, 2010

4th International Workshop on Multi-Paradigm Modeling - MPM'10

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Scope of the Workshop

Computational modeling has become the norm in industry to remain competitive and be successful. As such, Model-Based Design of embedded software has enterprise-wise implications and modeling is not limited to isolated uses by a single engineer or team. Instead, it has reached a proliferation much akin to large software design, with requirements for infrastructure support such as version control, configuration management, and automated processing.
The comprehensive use of models in design has created a set of challenges beyond that of supporting one isolated design task. In particular, the need to combine, couple, and integrate models at different levels of abstraction and in different formalisms is posing a set of specific problems that the field of Computer Automated Multiparadigm Modeling (CAMPaM) is aiming to address.
The essential element of multiparadigm modeling is the use of explicit and heterogeneous models throughout. This leads to a framework with omnipresent models. Some represent the syntax of formalisms used for modeling, others are used to model the transformations that represent the operational semantics, as well as model-to-model transformations for inter-formalism transformation. Moreover, others are used to model the composition of models or even to model the composition of modeling formalisms. These models are then used to facilitate generative tasks in a language engineering space, such as evolving a domain specific modeling formalism as its requirements change, but also in a tool engineering space, such as automatic generation of integrated development environments. The use of ubiquitous explicit models during the whole system design process, from modeling formalism definition to system implementation, allows multiple types of analyses at various levels with great benefits in terms of performance, cost-effectiveness, safety, etc.
The purpose of this workshop is to bring together researchers and practitioners in the area of Multi-Paradigm Modeling in order to identify possible points of synergy, common problems and solutions, tool building aspects and visions for the future of the area.

Topics of interest (not limited)

- Applications (of current MPM techniques and tools and test/validate it);
- Language Engineering (and modeling Language Engineering);
- Usability (and modeling Usability) of MPM tools and models;
- Model Transformation (and modeling Transformations);
- Language Composition;
- (Meta)Model Evolution;
- Multi-View Modeling;
- Model Exchange, Debugging, Testing and Consistency;
- Visualization of Multi-Paradigm Models;
- MPM Education;
- Multi-Abstraction.

Submission Procedure

Papers must be submitted electronically as PDF via http://avalon.aut.bme.hu/mpm10/. Papers should not exceed 12 pages and follow the style available at the workshop web site.
Papers will be peer reviewed. Accepted papers will be published in the workshop proceedings in the form of a technical report. The best two papers will be published in the LNCS series of Springer.

Important Dates

Paper submission deadline: July 31, 2010
Notification of acceptance: September 5, 2010
Camera-ready papers due: September 12, 2010