

Preface

To facilitate the processing and manipulation of models, a lot of research has gone into developing languages, standards, and tools to support model transformations. A quick search on the internet produces more than 30 different transformation languages that have been proposed in the literature or implemented in open-source or commercial tools. The increasing adoption of these languages and the growing size and complexity of the model transformations developed require a better understanding of how all activities in the model transformation life cycle can be optimally supported.

Properties of an artifact created by a model transformation are intimately linked to the model transformation that produced it. In other words, to be able to guarantee certain properties of the produced artifact, it may be very helpful, or even indispensable, to also have knowledge of the producing transformation. As the use and significance of modeling increase, the importance that the model transformations produce models of sufficient quality and with desirable properties increases as well; similarly, as the number and complexity of model transformations grows, the importance that transformations satisfy certain non-functional requirements and that life cycle activities for model transformations such as development, quality assurance, maintenance, and evolution are well supported grows as well.

The central objective of the AMT workshop is to provide a forum for the discussion and exchange of innovative ideas for the analysis of model transformations, broadly construed. Analyses might support a variety of model transformation activities including the development, quality assurance, maintenance and evolution by facilitating, for instance,

- the detection of typing errors, anti-patterns, dead code, transformation slices, likely invariants, or performance bottlenecks;
- the informal, semi-formal, or formal establishment of properties related to correctness or performance;
- test suite evaluation through code coverage determination;
- code completion and generation;
- the evolution of metamodels;
- impact analysis;
- refactoring.

Another objective of the workshop is to help clarify which transformation analysis problems can be solved with the help of existing analysis techniques and tools developed in the context of general-purpose programming languages and source code transformation languages, and which analysis problems require new approaches specific to model transformations. The exchange of ideas between the modeling community on the one hand and the programming languages community and source code transformation community on the other hand thus is another objective of the workshop.

In this third edition, AMT received 16 submissions, out of which 9 were accepted. The workshop also held a keynote speech by Ronan Barrett from Ericsson on exploring the non-functional properties of model transformation techniques used in industry. We are grateful to all authors, attendees, program committee members, external reviewers and local organizers for helping make AMT 2014 a success.