



Preface

This volume contains the proceedings of the Fifth International Workshop on Graph Transformation and Visual Modeling Techniques (GT-VMT 2006), held in Vienna, Austria on April 1 and 2, 2006, as a satellite event to the European Joint Conference on Theory and Practice of Software (ETAPS'06). The GT-VMT workshop series serves as a forum for all researchers and practitioners interested in the use of graph-based notation, techniques and tools for the specification, modeling, validation, manipulation and verification of complex systems. Previous workshops have been organized in Geneva (2000), Crete (2001), Barcelona (2002 and 2004).

Due to the variety of languages and methods used in different domains, the aim of the workshop is to promote engineering approaches that starting from high-level specifications and robust formalizations allow for the design and the implementation of such visual modeling techniques, hence providing effective tool support at the semantic level (e.g., for model analysis, transformation, and consistency management). In fact, the workshop series attracts the interest of communities working on popular visual modeling notations like UML, Graph Transformation, Business Process/Workflow Models.

This year's workshop had an additional focus on Models for Mobile Systems and Services (including Service-Oriented and Global Computing architectures) where huge and highly dynamic graph-like structures offer a challenging ground for the application of graph transformation techniques and tools.

We are very glad to announce that GT-VMT 2006 received a record number of submissions (exactly 40), requiring unexpected efforts from the PC members. To guarantee the fairness and quality of the selection, each paper received at least three reviews. Given that many submissions proposed very promising ideas and tools, even if not fully developed yet, we decided to include some of them both in the workshop programme, to stimulate the discussion among participants, and in these proceedings, tagged as *short contributions*.

The Program Committee selected 13 regular contributions for presentation plus 10 short contributions. These were grouped in six sessions on “Theory of Graph Transformation”, “QVT and Graph transformation”, “Verification of Validation”, “Models, Code, Metrics”, “Programming and Implementation Techniques”, “UML and OCL”.

Additionally, the programme included two invited talks by

- Jeff Magee (Imperial College, London, UK);
- Jana Koehler (IBM Research, Zurich, Switzerland).

Jana Koehler's lecture is included in these proceedings.

The organizers acknowledge the support by the European Research Training Network *SegraVis* (Syntactic and Semantic Integration of Visual Modelling Techniques), and by the IST Integrated Project *SENSORIA* (Software Engineering for Service-Oriented Overlay Computers) funded by the European Union in the 6th framework programme as part of the Global Computing Initiative. We warmly thank Reiko Heckel and Andrea Corradini for proposing us to organize the workshop in connection with ETAPS 2006 (for the second time, after the venue of ETAPS 2004 in Barcelona). We also thank all our colleagues in the Program Committee and those who helped us as external reviewers for their tremendous efforts in producing their reports under a very tight schedule, that coincided essentially with Christmas holidays. A special thank goes to Silvia Masini for drawing the workshop logo. We are very grateful to the ETAPS organizers, especially to Andreas Krall, for taking care of all the local organization, including the printing of these proceedings and for accommodating all our special requests.

Program committee

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Dániel Varró (Budapest University of Technology and Economics, Hungary) [**co-chair**]

Martin Wirsing (Ludwig-Maximilians-Universität München, Germany)

List of Referees

As already mentioned, the papers were refereed by the program committee and by several outside referees, whose help is gratefully acknowledged.

András Balogh	Martin Gogolla	Ulrike Prange
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Roberto Bruni
Dániel Varró