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Theory and Practice of Model Transformations

5th International Conference, ICMT 2012
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Preface

This volume contains the papers presented at the International Conference on Model Transformation (ICMT 2012) held during May 28–29, 2012, in Prague, Czech Republic.

Modeling is essential in reducing the complexity of software systems during their development and maintenance. Model transformations are essential for elevating models from documentation elements to first-class artifacts of the development process. Model transformation includes model-to-text transformation to generate code from models, text-to-model transformations to parse textual artifacts to model representations, model extraction to derive higher-level models from legacy code, and model-to-model transformations to normalize, weave, optimize, simulate and refactor models, as well as to translate between modeling languages.

ICMT is the premier forum for contributions advancing the state of the art in the field of model transformation and aims to bring together researchers from all areas of model transformation. Model transformation encompasses a variety of technical spaces, including modelware, grammarware, and XML-ware, a variety of transformation representations including graphs, trees, and DAGs, and a variety of transformation paradigms including rule-based graph transformation, term rewriting, and implementations in general-purpose programming languages. The study of model transformation includes foundations, semantics, structuring mechanisms, and properties (such as modularity, composability, and parameterization) of transformations, transformation languages, techniques, and tools. To achieve an impact on software engineering practice, tools and methodologies to integrate model transformation into existing development environments and processes are required.

This was the fifth edition of the conference, and this year we accepted two kinds of contributions: research and tool papers. We received 69 abstracts, of which 56 materialized as full papers, and 16 research papers and 2 tool papers were selected, with an acceptance rate of 32%. In addition to 18 contributed papers, the program included an invited talk by James Terwilliger (Microsoft) on a unifying theory for incremental bidirectional model transformation.

ICMT 2012 was made possible by the collaboration of many people. We were supported by a great team. As Web Chair, Davide Di Ruscio kept the information up to date on the conference website, and Jesús Sánchez-Cuadrado actively publicized the conference, in his role of Publicity Chair. The Steering Committee was very helpful and provided advice when we needed it. We thank the TOOLS

teams headed by Bertrand Meyer for taking care of the organization of the conference. Finally, we would like to thank all the members of the ICMT 2012 Program Committee for the tremendous effort they put into their reviews and deliberations, and all the external reviewers for their invaluable contributions. The submission and review process was managed using the EasyChair system.

March 2012

Zhenjiang Hu
Juan de Lara

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