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UML Modeling Languages and Applications

«UML» 2004 Satellite Activities
Lisbon, Portugal, October 11-15, 2004
Revised Selected Papers

Volume Editors

Nuno Jardim Nunes
Universidade da Madeira, Campus da Penteada
Mathematics and Engineering Department
9000-390 Funchal, Portugal
E-mail: njn@uma.pt

Bran Selic
IBM Rational Software
770 Palladium Drive, Kanata, Ontario K2V 1C8, Canada
E-mail: bselic@ca.ibm.com

Alberto Rodrigues da Silva
INESC-ID and Instituto Superior Técnico
Rua Alves Redol, 9, 1000-029 Lisboa, Portugal
E-mail: alberto.silva@acm.org

Ambrosio Toval Alvarez
Universidad de Murcia, Campus de Espinardo
30100 Murcia, Spain
E-mail: atoval@um.es

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Preface

The «UML» 2004 conference was held in Lisbon (Portugal) from October 11 through October 15, 2004. It was the seventh conference in a series of annual events that started in 1998. «UML» has rapidly become one of the leading venues to present and discuss the development of object-oriented modeling. In order to reflect the changes in the field, the «UML» conference series will be continued from 2005 onwards under the name MODELS (Model Driven Engineering, Languages and Systems).

In an effort to make this year's conference more useful and effective for a wider community, including academics and practitioners working in areas related to UML and modeling in general, a set of satellite events was organized, including workshops dedicated to specific research topics, an industry track, a poster/demo session, and a tools exhibit. This volume is a compilation of the contributions presented at these satellite events.

Workshops at «UML» 2004 took place during the first three days of the conference (from October 10 to 12). Following the tradition of previous «UML» conferences, «UML» 2004 workshops provided a collaborative forum for groups of (typically 15 to 30) participants to exchange recent or preliminary results, to conduct intensive discussions on a particular topic, or to coordinate efforts between representatives of a technical community. Ten workshops were held, covering a variety of hot topics, which have been covered in the workshop reports contained in this volume. Each workshop lasted for a full day. A novelty with respect to previous «UML» conferences was the inclusion of a Doctoral Symposium, which was well received, to provide an explicit space for young researchers developing their thesis on some aspect related to UML. We would like to emphasize the relevant and innovative topics considered in the workshops at this «UML» conference edition as well as the high level of participation in all of them. All these workshops were selected by the Program Committee indicated below, after a formal review process. Special thanks are given to all members for their valuable support. We would like to thank also the Spanish Ministry of Science and Technology (project DYNAMICA/PRESSURE TIC 2003-07804-C05-05) for its aid in the workshop reports' publication.

The purpose of the industry track was to report on innovative results and experiences in the industrial application of software modeling and model-driven development in industrial settings. Competitive pressures and the all too familiar problems of traditional programming-oriented approaches to software development have led to some remarkable and highly innovative applications of model-driven development in industry. The organizing committee of the «UML» conference series felt that it was appropriate and timely to provide a forum where such results could be reported, not only to describe new and interesting techniques and technologies but also to demonstrate that model-driven development has been applied successfully and widely beyond the research lab environment.

The resulting 12 industry papers—all peer reviewed—combine a set of submissions selected by a dedicated Industry Track Program Committee (see below) and a set of invited papers from domain experts with proven results in industry. These papers are not mere experience reports, although experience is an important facet of all of them, but they describe important contributions to the evolving body of theory of model-driven development.

The poster/demo session took place during the main conference, from October 13 to 15. The 11 accepted submissions were displayed in the coffee-break room, enabling contributors to get the most feedback on their work. The list of accepted posters/demos spans many different research areas, from model-based testing to user-interface design; and also many application domains, from distributed systems to critical systems. The poster/demo contributions are available in this volume in the form of extended short papers. One of the goals of the UML is to provide tool support and interchange. Here you have an opportunity to be familiar with many interesting research projects.

Live demonstrations of cutting-edge systems were an important and exciting part of the conference. The tool exhibits session provided an excellent opportunity where participants analyzed and viewed the most relevant UML- and MDA-related tools in action and discussed these systems with their creators or distributors. The tool exhibits session took place during the main conference, from October 13 to 15, and included the following live demos: (1) “seCAKE: A Complete CASE Tool with Reuse Support”, dTinf; (2) “Making UML Diagrams Accessible for Visually Impaired Programmers”, FNB; (3) “The Suite of Telelogic Products: Doors/Analyst, TAU/Developer, and TAU/Architect”, Telelogic; (4) “IBM Rational Rose XDE Products”, Sinfic; and (5) “Nucleus BridgePoint”, Mentor Graphics. The tool exhibit contributions are available in this volume in the form of extended short papers.

Following this preface are several important pages listing the many people and organizations without which this event would not have been possible. Please take a moment to peruse these pages and join us in thanking them for their dedication and support. We also thank the staff at Springer for the help with the production of this volume.

Finally we think the excellent contributions in this volume speak for themselves.

November 2004

Nuno Jardim Nunes
Bran Selic
Alberto Silva
Ambrosio Toval

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