Message from the Organizers

This volume contains the proceedings of the Joint Meeting of the Fourth Workshop on Model-Based Development of Computer-Based Systems (MBD) and the Third International Workshop on Model-Based Methodologies for Pervasive and Embedded Software (MOMPES 2006). This joint event is organized within the 13th IEEE International Conference on Engineering of Computer Based Systems (ECBS 2006) and takes place in the city of Potsdam, located in the Berlin metropolitan area of Germany. The MBD/MOMPES 2006 meeting serves as a forum for disseminating scientific and practical aspects related with the adoption of MDA (OMG’s Model-Driven Architecture) and other MBD (Model-Based Development) methodologies (notation, process, methods, and tools) for supporting the construction of computer-based systems, and more specifically, pervasive and embedded software.

Model-Based Development (MBD) comprises approaches to software development separating the development process by constructing an application-oriented model and supporting the transition to implementation-oriented model. Therefore, with Model-Driven Architecture (MDA) as a prominent representative, MBD addresses technical issues like meta-models for architectural descriptions, suitable platforms, and automatic transformations from models to code. For a successful application of MBD, additional methodical aspects—like the definition of domain-specific models or analytic and generative techniques for these models—are needed.

The contributions of the workshop—consisting of both invited talks and regular papers—reflect both sides of MBD, providing a balance of theoretical contributions in various relevant areas and case studies showing the benefits of using model-based approaches in a wide range of applications areas. As demonstrated by the invited talks about experiences on the usage of model-based methodologies—one from academia, one from industry—MBD is a thriving field with advances in both theory and practice.

There were 24 papers submitted to MBD/MOMPES 2006. The authors represented 13 countries and 4 continents. We feel that this paper submission from such a diverse group of researchers is definitely a positive sign—indicating that this type of event is capturing a truly international audience.

The papers were reviewed by the Program Committee; every member received on the average three papers for review. Every paper was evaluated by three different reviewers. A total of 15 regular papers were accepted. The geographic distribution of the accepted papers was (based on the home country of the corresponding author): Germany - 5, Italy - 2, Belgium - 1, Brazil - 1, Finland - 1, France - 1, Hungary - 1, Portugal - 1, Spain - 1, and USA - 1.

We are grateful to Ms. Stephanie Kawada from the IEEE Computer Society for collecting the final versions of the accepted papers and preparing the proceedings. We also acknowledge the IEEE Computer Society Conference Publishing Services for agreeing to publish the MDB/MOMPES 2006 Proceedings and the IEEE Computer Society Technical Committee on the Engineering of Computer Based Systems (TCECBS) for cooperating in the collocation of the joint event of MBD/MOMPES 2006 with the ECBS 2006 Conference.

We thank all authors for their outstanding contributions, the Program Committee members, and other reviewers for selecting an excellent program.

This joint meeting has been supported by the University of Minho, Technical University of Ilmenau, and Technical University of Munich.

We hope you will enjoy the MDB/MOMPES 2006 Conference.

Ricardo J. Machado
João M. Fernandes
Matthias Riebisch
Bernhard Schätz