CALL FOR PAPERS - TIMOBD 2011

The First Workshop on Time Analysis and Model-Based Design, from Functional Models to Distributed Deployments (TiMoBD 2011)

http://retis.sssup.it/timobd/

In conjunction with the Embedded Systems Week (ESWEEK) 2011 <u>http://esweek.acm.org/</u> October 9 2011, Taipei, Taiwan.

Scope of the Workshop

Model-based and Model-driven design flows are very popular in the industry because of the possibility of analysis and verification by simulation or model checking and because of the availability of automatic code generation tools that provide a path to implementation.

However, in most flows, the timing behavior of the system depends on features of the computation and communication architecture that are modeled late or not modeled at all, bringing the possibility for an inappropriate selection of the computing platform (over- or underperforming) and possibly an incorrect software implementation of the functional model.

To this end, timing analysis techniques can provide support for the analysis of architecture solutions and system configurations and also define analytical methods for the synthesis of feasible/correct solutions. Hence, the need for a better integration of timing analysis technologies, methods and tools in model-based and model-driven flows. The workshop attempts at bridging the gap between the three communities of model-based design, real-time analysis and model-driven development, for a better understanding of the ways in which new development flows that go from system-level modeling to the correct and predictable generation of a distributed implementation can be constructed leveraging current and future research results.

Workshop Topics and Format

The workshop presentations will include a selection of original submitted papers, invited presentations and keynote speakers and possibly invited talks discussing experiences with projects and case studies.

The topics include (and are possibly not limited to)

- · Case studies in model-based or model-driven development of complex distributed embedded systems
- Application of domain-specific languages and profiles for analysis and validation of systems
- Automatic code generation techniques for complex distributed systems
- Models of platforms, transitions from platform-independent models to platform-dependent models
- Support for standards for components based modeling
- · Analysis and verification techniques
- Integration of Model-Based development and Model-Driven engineering
- Model-to-Model and Model-to-Text(code) transformations
- Synthesis and optimization of models

Workshop Organizers and Technical Committee

Marco Di Natale Sebastien Gerard	Scuola Superiore S. Anna, Italy CEA List, France	marco@sssup.it
Pieter Mosterman	The Mathworks, USA	
Julio Medina Pasaje	Universidad de Cantabria, Spain	
Roberto Passerone	Università di Trento, Italy	
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Stavros Tripakis	University of California, Berkeley, USA	
Tullio Vardanega	Università di Padova, Italy	
Wang Yi	Uppsala University, Sweden	
Alberto Sangiovanni-Vincentelli	University of California, Berkeley, USA	
Haibo Zeng	General Motors R&D, Palo Alto, USA	
Qi Zhu	Intel Corp. USA	

Paper Submission and Formatting Instructions

TiMoBD seeks original unpublished contributions of no more than 6 pages. The format of submitted papers must follow the IEEE conference proceedings guidelines (i.e., 8.5" x 11", Two-Column Format (see ftp://pubftp.computer.org/press/outgoing/proceedings/). All submitted papers will be reviewed.

Submissions must cover original research material, not necessarily fully developed but with innovative and stimulating ideas, concepts and realizations. Submitted papers should be sent before the deadline to any of the organizers' email addresses.

Position papers are acceptable, discussing the ideas of the authors with respect to a specific challenging problem.

Each accepted paper must be presented in person by one of the authors. Note that, in order to have the paper published in the proceedings, at least one of the authors of each accepted full or short paper must register by paying the full registration fee as a participant to the workshop.

Important Dates

*	Paper	submiss	ions	due:

- * Acceptance notification:
- * Camera ready version due:
- * Workshop:

August 7th, 2011 August 31st, 2011 September 15th, 2011 October 9th, 2011