

2nd Workshop on Model Based Engineering for Embedded Systems Design

Call for Contributions

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AUTHOR INFORMATION

Submission format: Abstract: 2 pages

PDF format, IEEE double column

Final paper format:

- Short papers: 2-4 pages
- Long papers: 4-6 pages
- PDF format, IEEE double column

Each accepted paper will be electronically published in the Workshop Proceedings and given in hard-copy form to each participant. Each accepted paper must be presented at the workshop by one of the authors.



IMPORTANT DATES

Submission of abstracts: 15 November 2010 Acceptation: 26 November 2010 Full paper final version: 20 February 2011 Workshop: 18 March 2011

A workshop co-located with DATE and supported by the MARTE Users' Group (<u>www.ecsi.org/marte-ug</u>), the Adams support action (<u>www.adams-project.org/</u>) and ECSI (Electronic Chips & Systems design Initiative <u>www.ecsi.org</u>).

Workshop web page: www.ecsi.org/m-bed

The application of model-based engineering (MBE) methods for software and systems development in industry is increasing. Moreover, the integration of component-based approaches with MBE has further accelerated its adoption along is also providing a basis for a sounder theoretical underpinning.

The focus of this workshop is on the use of MBE for embedded systems development (e.g. in the industrial transport sector for applications such as railway systems, automotive, aerospace, and related domains). In this context, special focus is given to MARTE, the UML profile for Modeling and Analysis of Real-Time and Embedded systems, which has proven successful in a number of projects.

In particular, the intent is to concentrate on the following topics:

The infrastructure that supports MBE, that is, the requisite languages, tools, and standards, as well as the combination of design and V&V activities, and the diverse engineering disciplines involved in embedded system design.

Process and methodology related issues, such as guidelines for deciding when and how to use domain-specific languages, appropriate integration of tools, and advanced methods to assist on architecture exploration subjected to multiple non functional constraints. *Experience with applying MARTE* and suggestions of improvements to this standard.

The aim of the workshop is to bring together researchers as well as system designers and tool developers from both industry and academia to discuss applications of model-based engineering in general and MARTE usage in particular. A significant portion of time will be reserved for discussion. Complementing the accepted paper presentations will be several invited presentations by members of the MARTE standardization task force, specialists participating in relevant European projects, and representatives of MBE tool vendors.

The one-day workshop is organized in multiple sessions, each focusing on a particular topic. Rather than have questions at the end of each presentation, all discussion will be conducted at the end of the session, with all presenters in the session responding as a group to questions of the session moderator as well as other attendees.