



1st FMTV'14 Workshop

Formal Methods for Timing Verification 2014

Singapore, 12 or 13 May 2014

Important Dates

Submission deadline: 04 March, 2014

Notification acceptance: 24 March, 2014

Final version papers: 11 April, 2014

FMTV'14 Workshop: 12 or 13 May 2014

Workshop Website

http://www.merge-project.eu/?page_id=192

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Submission Guidelines

Authors may apply by sending a paper (6-15 pages) in English describing their contribution. The work does not need to be absolutely original but the paper should bring insights and contribute to the discussion of the topics of the workshop and it should not have been published as such elsewhere. Position papers, work-in-progress, surveys are also welcome. Manuscripts must be conforming to the Springer LNCS formatting guidelines: <http://www.springer.com/computer/lncs> (same format as the conference papers). The submission deadline is 18th February 2014. Authors of accepted papers shall prepare and submit a final version of their paper before 11th April 2014. Accepted papers will be distributed to the attendees in the workshop proceedings and (with the authors consent) in the workshop web page. Authors retain the full copyright of their contributions.

Goals

The growing complexity of real-time embedded systems creates new challenges for performance evaluation engineering practices: it is namely expected that delivered products implement more and more complex features, while respecting strict real-time requirements. For such systems, an ever-increasing portion of design effort is therefore spent on timing verification. The verification space covering the system timing behavior is likely to be very large making it infeasible to verify each point in this space. Formal timing verification methods and techniques allow tackling this problem by providing formal proofs on an abstract mathematical temporal model of the system. Such temporal models are however rarely used in the industrial design practices, thus requiring additional efforts from the timing verification community to fill the gap between the design model and the temporal model semantics.

The purpose of the FMTV14 Workshop is to share ideas, experiences and solutions to concrete timing verification problems. Industrials are also invited to provide feedbacks on applying formal timing verification techniques in their context.

The particularity of this workshop will be the presentation of a challenge to the formal timing verification community with scientific stakes issued from a real industrial case study. Original unpublished papers on all aspects of formal timing verification for real-time embedded systems are welcome.

Topics

Topics include but are not limited to:

- Comparative evaluation of existing formal timing verification algorithms and techniques
- Integration and applicability of formal timing verification techniques in the industrial development practices
- Case studies and industrial experiences using formal timing verification techniques
- Scheduling analysis for real-time, distributed and embedded applications
- Network queuing analysis theory
- End-to-end response time analysis
- Formal methods for WCET computation
- Integration of WCET and scheduling analysis

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