WMC

1st International Workshop on Mixed Criticality Systems

at the IEEE Real-Time Systems Symposium (RTSS 2013)
Vancouver, Canada
3rd December 2013

http://www-users.cs.york.ac.uk/~robdavis/wmc/

Program Chairs:

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Steering Committee:
Sanjoy Baruah,
Liliana Cucu-Grosjean,
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Important dates:

Submission deadline:
  4th Oct 2013
Notification of acceptance:
  30th Oct 2013
Final Versions:
  6th November 2013
Workshop:
  3rd December 2013
Conference:
  3rd-6th December 2013

CALL FOR PAPERS

The purpose of WMC is to share new ideas, experiences and information about research and development of Mixed Criticality real-time systems.

THEMES

The workshop aims to bring together researchers working in fields relating to real-time systems with a focus on the challenges brought about by the integration of mixed criticality applications onto singlecore, multicore and manycore architectures. These challenges are cross-cutting. To advance rapidly, closer interaction is needed between the sub-communities involved in real-time scheduling, real-time operating systems / runtime environments, and timing analysis. The workshop aims to promote understanding of the fundamental problems that affect Mixed Criticality Systems (MCS) at all levels in the software/hardware stack and crucially the interfaces between them. The workshop will promote lively interaction, cross fertilisation of ideas, synergies, and closer collaboration across the breadth of the real-time community, as well as attracting industrialists from the aerospace, automotive and other industries with a specific interest in MCS. Original unpublished papers on all aspects of mixed criticality real-time systems are welcome. Themes include, but are not limited to:

o Task and system models for MCS on singlecore, multicore, and manycore platforms.
o Scheduling schemes and analyses for MCS, including the integration of appropriate models of overheads and delays.
o Run-time environments and support for MCS, including data exchange and synchronisation across criticality levels, and issues relating to criticality mode.
o Analysis of worst-case execution times (WCET) relating to MCS.
o Mixed criticality communications mechanisms and analysis, including Network-on-Chip support.
o Probabilistic analysis techniques for MCS.

The workshop does not aim to cover security aspects that relate to some MCS.

PAPER SUBMISSION

Papers must be submitted electronically in a pdf format. The material must be unpublished and not under submission elsewhere. Submissions must be in the same format as in the final proceedings (6 pages maximum, 2 columns, 10 pt) compliant with the IEEE formatting guidelines. Papers exceeding the page limit will not be reviewed. See the workshop website for further details about submissions.

PROCEEDINGS

WMC will publish informal proceedings. The authors retain the copyright to their work and are free to submit extended versions to a conference or journal.

Submission deadline extended to: 11th October 2013

PROGRAM COMMITTEE

Sanjoy Baruah, Arvind Easwaran, Sebastian Faucou, Laurent George, Raphael Guerra, Leandro Indrusiak, Karthik Lakshmanan, Giuseppe Lipari, Claire Maiza, Vincent Nelis, Moritz Neukirchner, Gabriel Parmer, Susan van der Ster, Wang Yi