WMC

5th International Workshop on Mixed Criticality Systems

at the IEEE Real-Time Systems Symposium (RTSS 2017)
Paris, France
5th December 2017

https://cps-research-group.github.io/WMC2017/

Program Chairs:

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Important dates:

Submission deadline:
25th Sep. 2017
Notification of acceptance:
25th Oct. 2017
Final Versions:
10th Nov. 2017
Workshop:
5th Dec. 2017
Conference:
6th - 8th Dec. 2017

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 related 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 Original unpublished papers on all aspects of mixed criticality real-time systems are welcome.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:

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

The scope of the workshop is real-time, mixed criticality systems. Papers that do not relate to real-time behaviour (i.e. are solely about security or safety aspects of MCS) will be considered as out of scope.

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.

PROGRAM COMMITTEE

Dirk Ziegenbein (Bosch Research, Germany), Zhishan Guo (Missouri University of Science and Technology, USA), Luca Santinelli (Onera, France), Jing Li (New Jersey Institute of Technology, USA), Leandro Soares Indrusiak (University of York, UK), Geoffrey Nelissen (ISEP, Portugal), Martina Maggio (Lund University, Sweden), Jaewoo Lee (KAIST, Korea),), Xiaoting Li (ECE Paris, France), Tam Chantem (Virginia Tech, USA), Pontus Ekberg (Uppsala University, Sweden)