26th International Conference on Real-Time Networks and Systems

October 10-12, 2018

RTNS'2018 https://rtns2018.ensma.fr Twitter : @rtnsconf #RTNS2018

Poitiers, France

ICPS



RTNS



Scope and Background

RTNS is a friendly and inclusive conference with a great sense of community that presents excellent opportunities for collaboration. Original unpublished papers on all aspects of real-time systems and networks are welcome. RTNS covers a wide-spectrum of topics in real-time and embedded systems, including, but not limited to:

- **Real-time applications design and evaluation:** automotive, avionics, space, railways, telecommunications, process control, multimedia.
- **Real-time aspects of emerging smart systems:** cyber-physical systems and emerging applications, real-time big data, real-time edge/fog and cloud computing.
- **Real-time system design and analysis:** real-time tasks modeling task/message scheduling, evaluation, mixed-criticality systems, Worst-Case Execution Time (WCET) analysis, quality of service, security.
- **Software technologies for real-time systems**: model-driven engineering, programming languages, compilers, WCET-aware compilation and parallelization strategies, middleware, Real-time Operating Systems (RTOS), hypervisors.
- Formal specification and verification: application of formal models, such as model checking, satisfiability modulo theories or constraint programming, to solve real-time problems.
- **Real-time distributed systems:** fault tolerance, time synchronization, task/messages allocation, adaptability and reconfiguration, publisher/subscriber protocols, distributed real time database
- **Real-time networks:** Networks on Chip (NoC), Time-Sensitive Networks (TSN), end-to-end latency analysis, wired and wireless communication networks, fieldbuses, networked control systems, sensor networks.
- Hardware support for real-time systems: hardware/software co-design, power/temperature-aware techniques, design of predictable hardware, multi-core and many-core platforms, hardware accelerators, cache related issues, interconnect and memory.

The 12th Junior Researcher Workshop on Real-Time Computing (JWRTC) is organized jointly with RTNS.

* Submission and Evaluation Process

Authors are invited to submit English-language research and application papers representing original, previously unpublished work. Duplicate submissions are not allowed. Papers must be submitted as a single PDF document,

REAL-TIME SYSTEMS via the Easychair system. Submissions are limited to 10 two-column pages for technical content and up to two for bibliography and acknowledgments (in a font no smaller than 9 points and must conform to ACM Latex style). All accepted papers will be published in ACM ICPS. Each accepted paper must be presented at the conference by one of the authors. A selection of the best papers will be identified as outstanding papers; the authors of these papers will be invited to submit extended versions to a **special issue** of the Springer Real-Time Systems journal.

* Conference Organization

General Chairs

- Emmanuel Grolleau, ISAE-ENSMA, France
- Yassine Ouhammou, ISAE-ENSMA, France
- · Frédéric Ridouard, University of Poitiers, France

Steering Committee

- Sanjoy BaruahLiliana Cucu-Grosjean
- Joël Goossens (chair)
- Isabelle Puaut
- Rob Davis
- Emmanuel GrolleauJean-Luc Scharbarg
- Sébastien Faucou
- Laurent George

***** Conference Venue

The conference will be held in ENSMA (*Ecole Nationale Supérieure de Mécanique et d'Aérotechnique*). It is located beside the Futuroscope, which is a French theme park focused on multimedia and audio-visual techniques, and 10 kilometers north of the Poitiers city center which has been a Gallo-Roman provincial capital with an outstanding architectural heritage.

Program Committee Chairs

- Moris Behnam, Mälardalen University, Sweden
- Mathieu Jan, CEA LIST, France

Important Dates

- Submission deadline: July 10, 2018 (tentative)
- Notification of acceptance: August 17, 2018
- Camera-ready papers: September 7, 2018

