RTNS 2022

The 30th International Conference on Real-Time Networks and Systems

June 7-8, 2022
Paris, France

The 30th edition of RTNS is expected to be organized as a hybrid event with its physical location in Paris from June 8, to June 9, 2022.

RTNS is a friendly and inclusive conference with a great sense of community that presents excellent opportunities for discussion and collaboration. The current plan is for the conference to be delivered in a hybrid manner, with a mix of physical and virtual presentations.

Important dates :

Submission Deadline: February 24, 2022

Notification: April 20, 2022

Camera ready deadline: May 4, 2022

Conference Date: June 7-8, 2022

Original unpublished papers on all aspects of real-time systems and networks are welcome. For this year, RTNS particularly welcomes position papers and papers defining open challenges. 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, smart grid.
- 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, thermal and power-aware system design.
- Software technologies for real-time systems: model-driven engineering, programming languages, compilers, WCET-aware compilation and parallelization strategies, middleware, Real-time Operating Systems (RTOS), virtualization, 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), wired and wireless sensor and actuator networks, Time-Sensitive Networks (TSN), industrial IoT, SDN, 5G, end-to-end latency analysis.
- 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.

RTNS'2022 is the 30th edition of the conference formerly known as RTS (Real-Time Systems, Paris). The first 12 editions of RTS were french-speaking events held in Paris in conjunction with the RTS Embedded System exhibition. Since its 13th edition, the conference language of RTNS has been English.