RTAS 2021
27th IEEE REAL-TIME AND EMBEDDED TECHNOLOGY AND APPLICATIONS SYMPOSIUM
as part of the Cyber-Physical Systems and Internet-of-Things Week (CPS-IoT Week) 2021

May 18-21, 2021, Nashville, USA
The conference may convert to the online mode if necessary

Call FOR Papers

RTAS is a top-tier conference with a focus on systems research related to **embedded systems** and **time-sensitive systems**. RTAS'21 invites papers describing original systems, applications, case studies, methodologies, and algorithms that contribute to the state of practice in design, implementation, verification, and validation of embedded systems or time-sensitive systems. RTAS'21 welcomes both papers *backed by formal proofs* as well as papers that focus exclusively on empirical validation of timing requirements. RTAS'21 consists of two tracks:

Track 1: Systems, Architecture and Applications

focuses on research of an empirical nature pertaining to systems, architecture and applications for time-sensitive or embedded systems. ***Track 1 also welcomes applied systems papers that focus on practical issues other than timing.*** Topics include, but not limited to:
- real-time and embedded operating systems,
- middleware and runtime systems for real-time and embedded systems,
- CPS and IoT infrastructure,
- hardware architectures for real-time/embedded systems, and
- WCET analysis and WCET-oriented software design.

Authors must include a section with experiments on a real implementation, or demonstrate applicability to realistic systems. Simulation-based results are acceptable if authors can clearly motivate why it is infeasible to develop and evaluate a real system.

Track 2: Applied Methodologies and Foundations

focuses on fundamental models, techniques, methods, and analyses that are applicable to time-sensitive systems. ***Submissions to this track must consider some form of timing requirements***. Topics include, but not limited to:
- scheduling and resource allocation,
- specification languages and tools,
- system-level optimization and co-design techniques,
- design space exploration, and
- verification and validation methodologies.

Authors ***must include a section on experimental results, preferably including a case study based on information from a real system***. The use of synthetic workloads and models is acceptable if appropriately motivated and used to provide a systematic evaluation.

Submission Guidelines

Submitted papers must describe original work not previously published or concurrently submitted elsewhere. RTAS 2021 is uses a **double-blind peer-reviewing process**. The main body of each paper is limited to **11 pages of technical content,** with additional pages permitted for the bibliography and acknowledgments. Submissions must be formatted according to IEEE conference paper guidelines (10pt font, default margins, default line-spacing). A submission based on previous work presented in a workshop with no digital object identifier (DOI) is eligible for acceptance, provided it contains at least 30% new material. The peer-review process at RTAS incorporates a rebuttal process. Submissions can be made here: https://rtas2021.hotcrp.com/

IMPORTANT DATES

Submission Deadline: Oct 26, 2020 (firm)
Author Rebuttal: Jan 2 – 5, 2021
Author Notification: Jan 17, 2021
Camera Ready: Mar 31, 2021

All times are UTC-12

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