

Call for Papers

The 28th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA)

Hybrid Conference at Aug. 23–25, 2022

<https://www.rtcса.org>



Conference Overview

The RTCSA conference series brings together researchers and developers from academia and industry for advancing the technologies and theories to design and develop time-sensitive systems and applications. Representative examples include CPS, IoT, embedded systems, and fog/edge/cloud computing. RTCSA welcomes academic and industrial papers describing innovative research or technical results of embedded and real-time systems.

Important Dates

- Abstract Submission Deadline: Apr. 22, 2022 (optional)
- Full paper Submission Deadline: Apr. 29, 2022
- Acceptance Notification: May 31, 2022
- Camera-Ready Submission Deadline: Jun. 30, 2022

Real-time Systems Track

- Real-time Scheduling
- Machine Learning-driven Real-time Systems
- Workload Models for Real-time Systems
- Temperature/Energy-aware Scheduling
- Scheduling over Heterogeneous Architectures
- Scheduling over Distributed Architectures
- Timing Analysis
- Formal Methods for Temporal Guarantees
- Programming Languages and Run-time Systems
- Middleware Systems
- Communication Networks and Protocols of Real-time Systems
- Time-sensitive Media Processing and Transmissions
- Latency and Throughput in Real-time Databases

Embedded Systems Track

- Embedded System Architectures
- Multi-Core Embedded Systems
- Operating Systems and Real-time Scheduling
- Embedded Software and Compilers
- Nonvolatile Memories and Storage
- Power/Thermal Aware Design
- Fault Tolerance and Security
- Sensor-based Systems and Applications
- Embedded Systems and Design Methods for Cyber-Physical Systems
- Reconfigurable Computing Architectures and Software Support
- Ubiquitous and Distributed Embedded Systems and Networks
- Embedded Systems for Machine Learning, and Machine Learning for Embedded Systems

IoT, CPS, and Emerging Applications Track

- Foundations and theory of IoT and CPS
- Systems and technology of IoT and CPS
- Applications and case studies of IoT and CPS
- Connected health and medical CPS
- Industrial Internet and reliable communications in Industry 4.0
- Innovative city technology and applications
- Intelligent transportation, Car2X, and vehicle infrastructure
- Cyber-Physical co-design
- Personal, wearable, and other embedded networked front-ends
- Machine learning in IoT and CPS
- Cloud, middleware, and networks for IoT and CPS
- Wireless sensor-actuator networks for IoT and CPS

