IEEE ISORC 2020

Nashville, Tennessee, USA
May 19-21, 2020

The 23rd International Symposium On Real-Time Distributed Computing

CALL FOR PAPERS

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IEEE ISORC 2020

ISORC has become established as the leading event devoted to state-of-the-art research in the field of object/component/service-oriented real-time distributed computing (ORC) technology. In addition to the main conference, ISORC 2020 will host a special session dedicated to *posters and demos*, where participants will be able to show prototypes, tools, simulators and systems, which demonstrate the applicability of real-time computing to different applications.

This year, ISORC will improve the peer-reviewing process introducing *double-blind* submissions and a *rebuttal phase*, where authors will have a chance to shortly reply to the reviewers' major objections before the final acceptance decision is taken.

Best Paper and *Student Paper Awards* will be delivered during the conference. Best papers from ISORC 2020 will be invited for submission to a *Special Issue of the Elsevier Journal of Systems Architecture (JSA)*.

Topics

IEEE ISORC 2020 welcomes contributions on topics that include, but are not limited, to:

- *Software architectures for real-time distributing computing*: programming paradigms, ORC paradigms, object/component models, languages, synchronous languages.
- *Distributed computing and communication infrastructures*: real-time communications, networked platforms, protocols, Internet QoS, peer-to-peer computing, sensor networks, VANETS and V2V and V2I communications, time-predictable systems and hardware, trusted and dependable systems, complex systems of systems, model maintenance.
- *Algorithms for real-time analytics*: real-time stream processing solutions including clustering, classification, mining and inferencing, machine and deep learning, statistical modeling, stream correlation and sampling.
- *System software*: real-time kernels, operating systems, virtualization/container mechanisms and distribution middleware for ORC, supporting QoS management and performance, decentralized processing and scalability, extensibility, synchronization, resource allocation, scheduling, energy efficiency, timing analysis, fault tolerance and resilience, security.
- *Applications*: medical devices, intelligent transportation systems, industrial automation systems and Industry 4.0, Internet of Things and Smart Grids, embedded and cyber-physical systems (automotive, avionics, autonomous vehicles, mobile devices, consumer electronics, building systems, sensors, etc), multimedia processing, RT Web-based Applications, QoS-Aware and real-time Cloud/Edge/Fog Computing, real-time packet processing for future networking infrastructures and Network Function Virtualization (NFV), time-sensitive social dispersed computing.
- *System evaluation*: monitoring mechanisms & infrastructures, performance & timing evaluation, dependability, end-to-end QoS, system/infrastructure overheads, fault detection and recovery time, large-scale evaluations and field studies.

For more information

More information about IEEE ISORC 2020, including submission guidelines, can be found at: https://isorc.github.io/2020.

Important Dates

Main Track
Submission deadline
January 17, 2020
Rebuttal period
March 9-11, 2020
Acceptance notification
March 20, 2020
Camera-ready papers
April 6, 2020

Poster/Demo Session
Submission deadline
March 24, 2020
Acceptance notification
April 1, 2020
Camera-ready papers
April 6, 2020