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 distributed 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](https://isorc.github.io/2020).