Special Issue

Advanced Real-Time Autonomous Systems

Message from the Guest Editors

Continuous advances in the field of artificial intelligence have encouraged its use in autonomous systems, such as autonomous driving vehicles, drones, and robots. As a result, their implementation and deployment are core research domains. Such systems include real-time aspects as they interact in a timely manner with their environment. This Special Issue welcomes high-quality manuscripts relating to the specification, optimization, and implementation of advanced autonomous real-time systems. This includes, but is not limited to, the following topics: - timing-predictable hardware acceleration mechanisms for ML applications; - real-time in-memory processing schemes; - code optimization and generation for real-time ML applications; - the certification of real-time autonomous systems: - realtime autonomous systems use cases; - dedicated worst-case execution time analysis techniques for ML applications; - models on the timing properties of ML hardware accelerators; - specification, training, and simulation frameworks for real-time autonomous systems; - scheduling algorithms for real-time ML applications.

Guest Editors

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Deadline for manuscript submissions

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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