Special Issue

Advances in High-Efficiency AI-Enabled Edge Computing for Distributed Networking Systems

Message from the Guest Editors

The Special Issue focuses on emerging research and technological breakthroughs integrating Artificial Intelligence techniques with edge computing paradigms. Its primary objective is to address challenges and opportunities associated with processing massive datasets at network edges, thereby improving efficiency, responsiveness, and scalability within distributed networking systems. The topics of interest for this Special Issue include, but are not limited to, the following:

- Novel AI algorithms that are specifically optimized for edge environments.
- Efficient edge computing architectures and frameworks incorporating AI.
- Practical implementation of AI-based solutions for real-time analytics and decision making.
- AI-driven resource management and allocation in distributed edge networks.
- Security, privacy, and reliability enhancements enabled by AI in edge computing contexts.
- Case studies that highlight significant advancements and deployment outcomes.
- AI-enabled edge computing in 5G networks and beyond.
- Performance evaluation and benchmarking of edge computing systems.
- Surveys for the essence of edge computing from AI perspectives

Guest Editors

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Deadline for manuscript submissions

15 October 2025

Electronics

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About the Journal

Message from the Editor-in-Chief

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.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

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