Special Issue

Efficient Networking Architectures for Next-Generation Smart and Connected Systems

Message from the Guest Editors

This Special Issue of Applied Sciences focuses on the evolving landscape of efficient networking across the entire digital ecosystem—from low-power wireless sensor networks to scalable cloud computing infrastructures. As data-driven applications continue to expand across domains such as smart cities, industrial automation, environmental monitoring, and healthcare, the demand for optimized communication and computation becomes increasingly critical. We invite original research and review articles that address innovations in one or more of the following or similar topics: networking protocols, energy-efficient communication strategies, distributed architectures, edge and fog computing, efficient blockchain networks, IoT frameworks, and cloud resource optimization. Submissions should emphasize practical implications, experimental validation, and the potential for real-world deployment. Researchers, practitioners, and engineers are encouraged to contribute to this interdisciplinary issue, which seeks to bridge the gap between embedded sensor networks and high-performance cloud computing, ultimately fostering more resilient and efficient digital infrastructures.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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