

Special Issue

Applications of Artificial Intelligence and Machine Learning in Communications and Networks

Message from the Guest Editors

This Special Issue explores the transformative applications of AI and ML in communication systems and networking. This Special Issue explores the transformative applications of AI and ML in communication systems and networking. These technologies are driving a paradigm shift in wireless networks, effectively challenging traditional heuristic and algorithm-based solutions, including routing protocols and traffic engineering. The current literature increasingly integrates AI-driven methods into signal processing and channel coding, enhancing performance beyond the limits of conventional mathematical models. Overall, this Special Issue underscores the growing importance of AI and ML in shaping the future landscape of communications and networks.

The scope of this Special Issue is broad, given below:

- Network Optimization and Management
- Resource Allocation
- Congestion Control
- Channel estimation and modeling
- Beamforming
- Cognitive Radios
- Security of AI-enabled
- Edge Computing
- Cloud Computing
- UAV-Assisted Wireless Networks
- Social Networks
- Small-world Networks
- Network Slicing
- Optimization in Communication
- Non-Orthogonal Multiple Access

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About the Journal

Message from the Editor-in-Chief

Network provides full coverage of all topics of interest involved in the networking area. The purpose of this journal is to bring together researchers, engineers, and students from academia and industry to present novel ideas and solid research about the theoretical and practical aspects in the application domains of communications and networks. The primary focus of the journal is on the analysis, modeling, design, simulation, and implementation of networks. This journal will also serve to attract research concerning applying networking architectures and scenarios to emerging research topics such as Internet of Things (IoT), edge computing, distributed ledger technology, among others.

Editor-in-Chief

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