Special Issue

Peer-to-Peer Networking and Applications

Message from the Guest Editors

This Special Issue invites contributions that address the critical trade-offs between performance, cost, adaptability, and security in peer-to-peer (P2P) networks, with the goal of advancing robust, scalable. and secure decentralized systems. P2P networks face unique challenges as they must balance high security standards and privacy preservation with the need for efficient, low-cost operations. Additionally, these networks must adapt dynamically to frequent changes in peer availability and network topology without compromising on reliability or exposing vulnerabilities. We welcome papers focused on the design and development of innovative frameworks and protocols that address these trade-offs, including simulation studies and real-world testbeds that bridge the gap between theoretical solutions and practical deployment. This call highlights pioneering research that optimizes these complex trade-offs, ultimately enhancing the scalability, security, and applicability of P2P networks and driving a future of more resilient and efficient decentralized systems.

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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.

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