

Special Issue on
Blockchain Practices and Applications in Networks and Communications

CALL FOR PAPERS

As a distributed ledger technology, blockchain allows data and transactions to be securely stored and authenticated without a centralized authority. Blockchain, as a novel distributed consensus mechanism, not only provides a shared immutable database across nodes without trusting each other but also provides a shared programable infrastructure to run programs in distributed networks. It has the potential to change the order of the world, and it becomes the foundation of a more righteous society based on equality and liberty. The emerging blockchain ecosystem will enable many new forms of distributed and unprecedented scale-free people collaborations and communications.

Currently, blockchain provides a decentralized approach to solve most of the problems existing in computer networks and communications. A distributed network built with blockchain technology can be adopted to process the massive number of transactions between the nodes, which will significantly reduce the costs associated with installing and maintaining large centralized data centers. This will also prevent a Single Point of Failure (SPOF) in a network from bringing the entire distributed network to a halting collapse. This special issue aims to collect the most relevant ongoing research and development efforts in blockchain practices and applications in networks and communications.

Potential topics include but are not limited to the following:

- ▶ Blockchain practices and applications
- ▶ Smart contracts, DAOs (Decentralized Autonomous Organizations), and DApps
- ▶ Distributed trust, privacy, and security in blockchains
- ▶ Blockchain consensus models (e.g., PoW, PoS) in distributed networks
- ▶ Self-managed mesh networks using blockchain
- ▶ Blockchain-based authentication
- ▶ Blockchain-based communications
- ▶ Public, consortium, and private blockchain networks
- ▶ Decentralizing networks through blockchain

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jcnc/bttp/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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