

Special Issue on  
**Blockchain and Edge Intelligence in the Internet of Things**

CALL FOR PAPERS

In recent years, the Internet of Things (IoT) technology has rapidly developed. Because of this trend, the exponentially increasing data imposes tremendous pressure on network bandwidth, energy consumption, latency, etc. The security and privacy issues have increased significantly. Nowadays, edge intelligence and blockchain have become popular research topics due to their ability to tackle the issues mentioned above.

Through the deployment of artificial intelligence at the network edge, edge intelligence endows the devices with human-like intelligence to execute tasks in a fast and efficient manner, greatly reducing the latency and relieving the bandwidth pressure. With improved interoperability, reliability, and scalability, blockchain is essentially a perfect complement to IoT, enabling trust establishment, repository, and transfer. There is a natural advantage in the convergence of edge intelligence and blockchain because they have common demands for data analysis, security, and trust. However, the integration of blockchain and edge intelligence is still poorly understood.

The aim of this special issue is to solicit original research and review articles linking blockchain and edge intelligence with IoT. We welcome submissions from both academic and industry researchers.

Potential topics include but are not limited to the following:

- ▶ Architecture and protocol design for the integration of blockchain and edge intelligence in IoT
- ▶ Blockchain enabled edge intelligence in IoT
- ▶ Edge intelligence empowered blockchain in IoT
- ▶ Joint blockchain and edge intelligence for data sharing and trading in IoT
- ▶ Resource management for the integration of blockchain and edge intelligence in IoT
- ▶ IoT applications for blockchain and edge intelligence (e.g., vehicular networks, healthcare, industry 4.0, maritime communications networks, and air-ground integrated networks)
- ▶ Incentive scheme, consensus algorithm, and smart contract design in blockchain for IoT
- ▶ Performance analysis and experimental measurement for blockchain-enabled IoT applications
- ▶ Implementation, testbed, and deployment of intelligent blockchain
- ▶ Blockchain-enabled edge intelligence solution for efficient wireless communications for IoT

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=751419>.

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

**Lead Guest Editor**

Celimuge Wu, University of Electro-Communications, Tokyo, Japan  
*celimuge@uec.ac.jp*

**Guest Editors**

Qingqi Pei, Xidian University, Xidian, China  
*qqpei@mail.xidian.edu.cn*

Maode Ma, Nanyang Technological University, Singapore  
*emdma@ntu.edu.sg*

**Submission Deadline**

Friday, 17 December 2021

**Publication Date**

May 2022