

Special Issue on: Blockchain-based Secure and Trusted Computing for IoT

The Internet of Things (IoT) is expected to connect massive number of smart devices to the Internet. The existing centralized architecture for handling the huge volume of data created in the IoT is facing many research challenges, including security and privacy, trustworthiness, operational challenges, business models and the practical aspects, legal and compliance issues. These challenges ask for new approaches to online identity, trustworthy transactions, and resilient networks.

In recent years, the emerging blockchain based decentralization has attracted a considerable amount of research interests in solving the aforementioned challenges, which promises to enable IoT devices a decentralized computational platform with guaranteed security and privacy. Blockchain can provide IoT solution partners to securely access and supply IoT data without the need for a central control and management, in which all partners can verify each transaction, preventing disputes and ensuring each partner is held accountable for the individual roles in the overall transactions.

The IoT and blockchain are two of the most transformative technologies in the world today. By employing the blockchain, IoT solutions can enable secure, trusted messaging between devices and maintain a decentralized, trusted ledger of all transactions without the need for a centralized authority and management.

This special issue aims to bring together researchers from both academia and industry to discuss the most recent advances on integrating social networks with IoT solutions. The topics of interest to this Special issue include, but not limited to

- Theories of blockchain and decentralized systems
- Blockchain in social networking
- Blockchain schemes for decentralization in IoT
- Blockchain-based security solution for IoT
- Blockchain-based trusted computing
- Applications of blockchain in IoT scenarios
- Lightweight cryptography in the IoT
- Blockchain in the IoT
- Anonymity in the blockchain and IoT
- Accountability and privacy in blockchain
- Smart contracts for IoT
- Blockchain in cloud IoT
- Blockchain in big data
- Scalability of blockchain and IoT
- Legal and regulation issues in blockchain and IoT

Please note the following **important dates**.

Submission Deadline:

31st Dec 2018

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