Call for Papers

Workshop on BlockSecSDN: Blockchain for Secure Software-defined Networking in Smart Communities

SCOPE

Software-defined Networking (SDN) helps to easily modify the network topology, and besides, maintain data consistency and interoperability among heterogeneous IoT devices with the help of automation. Although SDN technology performs resilient and reliable connections in the heterogeneous environment based on secure communication protocols designed by the network programmers, still chances of security threats may occur as a single controller is handling the complete network infrastructure. Nowadays, Blockchain, a distributed ledger, is often linked to the financial service industry due to the concept of its underlying inception and the success, i.e, bitcoin. But, it is a wrong conception to confine blockchain to only one vertical. Contrary to popular opinion, blockchain can be closely associated with security and thereon can transverse across all the industries and smart communities. Under this umbrella, one possibility is the blockchain for Secure SDN, and large scale network enterprises are already investing and exploring this opportunity.

TOPICS OF INTEREST

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Security and privacy for innovative service delivery models.
- Lightweight Cryptography in wireless sensors nodes for SDN security.
- Quantum Cryptography in heterogeneous IoT devices for SDN security.
- Blockchain for secure device-to-device communication in SDN.
- Authentication, authorization, and access control for SDN security.
- Blockchain for anomaly detection in smart communities.
- Blockchain for secure integration of IoT and fog devices for SDN.
- Heterogeneous blockchain models and trustworthy architectures.
- Blockchain for secure data storage and computing model in SDN.
- Deduplication architectures for blockchain-enabled cloud storage.
- Intrusion detection and prevention system for SDN security.
- Blockchain for secure transaction management using SDN.
- Testbed and experimental components tailored to specific BlockSecSDN.

PAPER SUBMISSION

All papers for Workshops should be submitted via EDAS. Full instructions on how to submit papers are provided on the IEEE ICC 2023 website: https://icc2023.ieee-icc.org/