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(57) Abstract :
The proposed invention is a system and method for secure, long-distance communication between wireless sensor networks (WSN) and internet of things (IoT) devices using blockchain technology. The system utilizes a blockchain-based network for storing and sharing public keys, a consensus algorithm for validating the authenticity of public keys, and a cryptographic module for encrypting and decrypting data transmitted between IoT devices and WSN. The proposed system provides a high level of security for communication between IoT devices and WSN, enabling safe and reliable transmission of data over long distances. The blockchain-based network ensures that public keys are secure and tamper-proof, and the consensus algorithm validates the authenticity of public keys added to the network. The cryptographic module provides encryption and decryption for data transmitted between IoT devices and WSN, ensuring that sensitive data is protected from unauthorized access. Overall, the proposed system offers a secure and reliable solution for long-distance communication between WSN and IoT devices.

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