Blockchain for IoT Security and Privacy in Healthcare Sector

Authors : Umair Shafique, Hafiz Usman Zia, Fiaz Majeed, Samina Naz, Javeria Ahmed, Maleeha Zainab

Abstract : The Internet of Things (IoT) has become a hot topic for the last couple of years. This innovative technology has shown promising progress in various areas, and the world has witnessed exponential growth in multiple application domains. Researchers are working to investigate its aptitudes to get the best from it by harnessing its true potential. But at the same time, IoT networks open up a new aspect of vulnerability and physical threats to data integrity, privacy, and confidentiality. It's is due to centralized control, data silos approach for handling information, and a lack of standardization in the IoT networks. As we know, blockchain is a new technology that involves creating secure distributed ledgers to store and communicate data. Some of the benefits include resiliency, integrity, anonymity, decentralization, and autonomous control. The potential for blockchain technology to provide the key to managing and controlling IoT has created a new wave of excitement around the idea of putting that data back into the hands of the end-users. In this manuscript, we have proposed a model that combines blockchain and IoT networks to address potential security and privacy issues in the healthcare domain. Then we try to describe various application areas, challenges, and future directions in the healthcare sector where blockchain platforms merge with IoT networks.

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