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Blockchain-IOT Healthcare Applications

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Abstract: The integration of Blockchain and Internet of Things (IoT) technologies is revolutionizing the healthcare industry by enabling secure, transparent, and decentralized systems for managing patient data and medical operations. This paper presents a comprehensive review of current applications and emerging trends at the intersection of Blockchain and IoT in healthcare. Key use cases include electronic health record (EHR) management, remote patient monitoring, drug supply chain traceability, and automated healthcare services through smart contracts. The combination of real-time IoT data with Blockchain's immutability enhances data integrity, security, and interoperability. Despite these benefits, challenges such as scalability, latency, and regulatory compliance remain. As part of this study, we also discuss the design and implementation of a Blockchain-based Health Care Management System, developed as our final year project, which demonstrates the practical application of these technologies in improving data security and accessibility in a hospital setting. This review aims to offer valuable insights into the future directions and research opportunities in Blockchain-IoT-based healthcare systems.

Keywords: Blockchain, Internet of Things (IoT), Healthcare, Electronic Health Records, Smart Contracts, Data Security, Final Year Project. Keywords: Visually Impaired, Cloud Computing, Object Detection, Recognition, Image Analysis



