



Blockchain in Healthcare Applications: Research Challenges and Opportunities

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Introduction

In recent years, blockchain technology has emerged as a transformative force in various industries, and healthcare is no exception. The potential of blockchain in healthcare applications is vast, ranging from secure data storage and sharing to streamlining supply chain management and patient care. However, the widespread adoption of blockchain in healthcare is still in its early stages, and several research challenges and opportunities must be addressed to realize its full potential. This article explores the current state of blockchain in healthcare, highlighting the key challenges and opportunities that researchers and practitioners must navigate. [1-3]

Research Challenges

Scalability: O

As the number of healthcare providers and patients grows, the volume of data generated increases exponentially. This poses a significant challenge for blockchain-based systems, which often struggle to handle large-scale data efficiently. Research is needed to develop scalable blockchain architectures that can accommodate the growing demands of healthcare applications.

Interoperability: H

Healthcare data is often siloed within different organizations and systems, making it difficult to share and analyze. Blockchain has the potential to facilitate interoperability by providing a secure and transparent platform for data exchange. However, achieving interoperability requires standardization and collaboration across various stakeholders in the healthcare ecosystem.

Privacy and security: W

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