

Data Re-Encryption Approach to Secure Data Sharing using Blockchain

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Abstract: This paper proposes a Data Re-Encryption (DRE) approach to address security and privacy concerns in cloud-based data sharing using blockchain technology. The proposed approach uses smart contracts for access control and re-encryption, ensuring authorized users can access shared data. A trusted third party performs re-encryption without revealing the original data, and a consensus algorithm guarantees integrity. The DRE approach is evaluated through simulation, demonstrating scalability, efficiency, and security.

Keywords: Data Re-Encryption

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