

Blockchain System for Trustless Healthcare Data Sharing with Hyperledger Fabric in Action




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Abstract— Healthcare data security is a much-discussed topic nowadays. Medical data storage and sharing require security, privacy, and trust between organizations. Different research organizations, medical institutes, or individual researchers publish their research results but sometimes they need to share the data as well. In this scenario, a secure and transparent medical data-sharing system is much needed. In this work, we are proposing a blockchain-based system for medical data sharing between organizations. The system ensures security, privacy, transparency, and trust, hence trust between the organizations is not necessary. Since the system requirement is permission, a private or permissioned blockchain is used. We have set up the blockchain infrastructure using Hyperledger fabric, known for its flexibility and modular architecture.

Keywords— medical data, medical image, security, privacy, data sharing, blockchain, hyperledger fabric.

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