

GENESIS: EHR STORAGE WITH BLOCKCHAIN

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PROBLEM
STATEMENT



- The existing healthcare industry faces critical challenges in the management of Electronic Health Records (EHR).
- Security breaches and data leaks are frequent occurrences, leading to severe privacy concerns for patients.
- EHR systems often lack granular access control, making it difficult to manage who can view, modify, or share health records.
- Scalability is a persistent issue with traditional EHR systems, as they struggle to handle the growing volume of healthcare data efficiently.
- The need for data interoperability and seamless sharing between healthcare providers and institutions remains unmet.

ABSTRACT

- Our project presents a groundbreaking solution to address the critical issues in Electronic Health Record (EHR) management.
- By leveraging blockchain technology, we offer a secure, scalable, and privacy-centric EHR management system.
- This project combines Ethereum's robust blockchain infrastructure with the flexibility of smart contracts, IPFS for efficient off-chain data storage, and user-friendly MetaMask integration.

ABSTRACT

- The primary objective is to revolutionize EHR management, providing granular access control, robust security, and regulatory compliance.
- Through our system, healthcare data can be managed with a heightened focus on user privacy, data security, and efficient data sharing.
- This presentation will outline the key components of our solution and highlight the benefits it offers to the healthcare industry.

TECH STACK

- IDE: Visual Studio Code, Remix
- Languages: Javascript, Solidity
- Frameworks: ReactJS, ExpressJS,
- Communication Protocol: REST(HTTPS)
- Blockchain Provider: Ethereum (Ganarche)
- Deployment Platform: Web Application
- Third Party Integrations: Truffle, IPFS

REFERENCES

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 Records" in IEEE Access, Volume 7, 2019.

