

## BLOCKCHAIN BASED HEALTHCARE SYSTEM

ABINAYA PARAMESWARI B S ANANDHA SAMYUKTHA S DEEPALAKSHMI S DHARSHANA S

### ABSTRACT

Blockchain has unique advantages in data privacy protection and data integrity. We can solve many security problems, such as the single point of failure and data sharing in the current centralized system through blockchain approach. With the popularization of information technology, people have higher expectations for the continuity of medical assistance. It has become a trend to eliminate the problem of information isolation through data sharing. Blockchain technology has many prominent characteristics, such as distributed ledger, encryption technology, immutable audit trail and traceable data provenance. It can effectively solve the problem of data sharing among multiple organizations. It considers the security, tamper free and traceable features of blockchain. Combined with the needs of the medical system, we design a blockchain-based multi-role healthcare data sharing system. Here we combine the medical security system in our proposed. In addition, we design a smart contract to improve the insurance claim process, and two data sharing protocols for medical data and personal health data to provide users with a simple and efficient strategy for managing personal data.