



Journal of Medical Signals and Sensors (JMSS)

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***Special issue on* Appraisal of an Affordable Healthcare Private Blockchain Network Builds on Hyper-Ledger Fabric**

An extensive database is intended to maintain and retrieve healthcare data in a diagnostic communication maintenance system. For professional, financial, and ideological reasons, the electronic primary care system has modified the existing material medical record as the main repository of healthcare data. The healthcare professional seems to have control over the data, which increases the potential that it will be exploited. A private block chain-based middleware solution entitled Hyper-ledger Fabric is capable of securely supporting activities involving hostile or only partially trustworthy parties. Hyper-ledger Fabric is also capable of complicated logical operations to handle interactions among many organizations thanks to its extensible and flexible architecture. Device interfaces, data formats, and business logic can all be changed within a single Hyper-ledger Fabric context. Scientists are increasingly needed to explore various, easily accessible approaches to creating health information intended to facilitate professionals in accessing clinical information while protecting the security of the health data. Despite a number of challenges, the availability of several wearable technology sensors and gadgets that gather information on a device's physical and mental health,

Because blockchain is decentralized, no single entity has control over the data uploaded to it. Instead of using a variety of consensus protocols, peers in a peer-to-peer system assume the validity of the entries that are sent to the blockchain. Stability is another important feature of blockchain technology. Because of the distributed ledger's numerous nodes of storage, records that have been accepted for the blockchain would nearly never be erased. Health informatics procedures could be made more effective by a smart-contract feature, which frequently aims to minimize sector engagement. Nevertheless, such an effect was not revealed in any of the included publications. It is necessary to conduct further analysis and investigation on how efficient smart contracts are in comparison to existing alternatives. Like blockchain, hyper ledger was a popular framework used in the included sources. Using the blockchain Hyper-ledger Fabric and running on the cloud, the software health chain was developed as a cryptocurrency and secure blockchain network. A health chain would provide health secrecy, flexibility, and safety according to the Hyper-ledger Fabric's system structure.



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The objective of this special issue is to assess the interface among blockchain technological advances and the economic and healthcare sectors, as well as to offer several sources for potential blockchain applications in these sectors. The challenges that still persist when deploying blockchain technology based on Hyper-ledger Fabric are reflected in current adaptations in healthcare and social services.

Topics of interests:

- A rigorous analysis of the comparison using block chain and hyper-ledger fabric in medical sector
- Implementation of block chain-based hyper-ledger fabric smart contracts for health services
- Employing hyper ledger fabric at the network edge to secure electronic medical records
- Upon present adoption and implementation, block chain is a disruptive technology in the social and healthcare sectors
- Applying block chain to protect e-health networks from the infiltration of phishing medicines
- Technologies enabling trading biomedical and healthcare information with block chain-based confidentiality and security
- Effective Sensitive Information Pipeline Characterization Using Hyper-ledger Fabric block chain
- Adopting block chain technology in healthcare services on a broad scale: challenges and solutions
- Utilizing automated block chain technology for effective and scalable electronic health record maintenance
- A thorough analysis of block chain and the Internet of Things in the healthcare industry
- Emerging Possibilities and Challenges of block chain in Secure Medical Systems



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Important Dates:

- ✓ **First Submission Deadline: 30 Nov. 2023**
- ✓ **Notification of First Round Decision: 05 Feb. 2024**
- ✓ **Revised Paper Submission Deadline: 10 April, 2024**
- ✓ **Notification of Final Decision: 30 May, 2024**

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