**Mobile IT diagnostics system of medical data confidentiality of patients with neurological diseases**

Our research group at the Belarusian State University of Informatics and Radioelectronics has embarked on a groundbreaking journey to fortify the privacy and security of medical data in the rapidly expanding domain of the Internet of Things (IoT) within healthcare. Leveraging the innovative combination of blockchain technology and the Inter Planetary File System (IPFS), we aim to address the critical vulnerabilities associated with the protection of sensitive medical information generated by IoT devices.

Innovative Approach:

By integrating blockchain technology with the InterPlanetary File System (IPFS), we've developed a secure framework that addresses the inherent vulnerabilities of traditional data protection mechanisms. This novel solution leverages the decentralization, immutability, and transparency of blockchain, alongside the distributed nature of IPFS, to safeguard sensitive medical information generated by IoT devices.

Key Advantages:

Security and Privacy: Blockchain ensures the integrity of medical data by making it immutable, meaning once data is recorded, it cannot be changed or removed. IPFS offers decentralized storage, reducing the risk of data breaches.

Efficient Data Handling: By leveraging IPFS for data storage, our system efficiently manages large volumes of medical data, addressing blockchain's storage limitations.

Regulatory Compliance: Smart contracts automate the enforcement of data processing rules, ensuring the system adheres to strict privacy standards.

Our Goal:

Our goal is to enhance medical data management in IoT diagnostics, prioritizing the security and privacy of patient information. By improving data protection mechanisms, we seek to build trust in IoT applications within healthcare, ensuring patient information is securely managed and easily accessible when needed.

Meet Our Project Leader: Dr. Vishniakou Uladzimir Anatol'evich

Professor Vishniakou Uladzimir Anatol'evich, with a rich background in academic research including over 300 publications and 21 patents, significantly contributes to our Alzheimer's detection project with his deep expertise in information and communication technologies.

Join Us:

We cordially invite healthcare professionals, researchers, and individuals interested in blockchain to join us in exploring and promoting the development of this technology.

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