Patent Search

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Abstract:

IoT, Blockchain Enabled Verifiable Searchable Encryption with Aggregating Authorization using machine learning techniques Abstract: The Internet of Things (IoT) is th of things to the physical network that is equipped with software, sensors, and other devices to communicate information from one item to the other. Embedded in th the ability to collect and process data. Because of the interconnected nature of the devices, there is the potential for a variety of difficulties, including those pertainin dependability, reliability, secrecy, and other related topics. In order to solve these problems, we have developed an innovative group theory (GT)-based binary spring algorithm that takes the form of a hybrid deep neural network strategy. The proposed method is capable of accurately detecting the breach that occurred within the At first, the method that is now based on blockchain was used to put into action the technology that protects users' privacy. Because of its value and significance, pro patient health records (PHR) is the most important part of cryptography that takes place over the internet. This is especially true in the context of the Internet of Med (IoMT). The search keywords access mechanism is one of the typical methods that is used to retrieve PHR from a database; however, it is vulnerable to a variety of se due to the nature of the mechanism. Although blockchain-enabled healthcare systems offer increased safety, there is a possibility that these technologies will also in vulnerabilities into the current industry standard. In the published research, various blockchain-enabled frameworks have been suggested as potential solutions to th problems. However, the primary focus of these solutions has been on the storing of data, and the blockchain itself serves as the database. In this article, a homomor encryption mechanism is presented to be used in conjunction with blockchain as a distributed database in order to provide protection for keyword-based searches a the database. In addition to this, the system that was suggested includes a mechanism for the revocation of secure keys and changes the relevant policies accordingl consequence of this, a safe system for accessing patient healthcare data is developed. This system incorporates blockchain technology and trust chains in order to sc efficiency and safety problems that are present in the existing systems for exchanging both forms of digital healthcare data. As a result, the approach that we have su offers increased safety, efficacy, and transparency while maintaining a cost-effectiveness. OrigionLab and Hyperledger Fabric, two blockchain-based tools, served as t foundation for our simulations, which were then analysed and evaluated by us. We contrasted the outcomes of our suggested models with those of the respective be models. The results of our comparative analysis demonstrate that the healthcare system would benefit from the enhanced safety and searchability provided by the a that we have proposed.

Complete Specification

Description:Descriptions:

We propose a blockchain-based access control and safe searchable encryption system as a solution to the concerns and issues that have been brought up in the re that has been done on multisite clinical systems. [Citation needed] Through the usage of homomorphic encryption, it is utilised for the purposes of keyword search storing, retrieving, and sharing personal healthcare data. We base our method on the Hyperledger Fabric platform, and we provide homomorphic encryption for bo secure searching and secure data storage. The figure illustrates our proposed neural network for the framework that we proposed. The NN model under considera multiple layers, and each of these levels is responsible for carrying a different kind of information. We separated our Internet of Things (IoT) dataset into two distinc —the training dataset and the test dataset. We have provided an in-depth explanation of how each of our new algorithms works, and our proposed algorithms hav included into smart contracts for use with blockchain technology. Tabular representations of the parameters and notations that are included in the blockchain can b found throughout its content. In this section, we will discuss the architecture of the system that we have presented, including the configuration of the network, the installation of private channels, and the creation of intelligent contracts that are channel-specific. The function of both the blockchain-based system and the access decision system is shown in the figures in alternating fashion. In the past five years, blockchain has been one of the technologies that has received the most attenti to the widespread adoption of the technology's many cryptocurrencies. There have been a variety of use cases that have been realised through the application of blockchain technologies such as Bitcoin, Ethereum, and others. None of these use cases, however, covered essential infrastructure, which typically has sensitive sys and data as their primary assets. Even though blockchains like Ethereum offer important anonymity, integrity, and auditability features for their users, there are sig

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