An Efficient Secure Privacy Preserving Data sharing through Blockchain enabled IoT platform in healthcare

Abstract

In the healthcare system, there's lots of patient data that is stored and this data has to be safe and private. lots of research may be done to boost the healthcare system and discover quick and easier methods to detect and treat diseases. With blockchain applications in healthcare, now we can publish our medical records safely on the blockchain. And, be assured that an authorized person can access it anywhere. So, we are able to implement a system using Blockchain within which ensures data are going to be safe and secure. Blockchain helps to push self-management of a health condition by maximizing healthcare resources and providing chances for consumers to interact with caregivers. This proposed architecture of the framework allows secure data sharing and implemented a prototype that ensures privacy, availability, and access control over sensitive patient's data. We had preferred to use the semantics of healthcare data to increase the structure of a patient record and its metadata, including the flexibility of exchanging radiological images, which is considerably difficult.
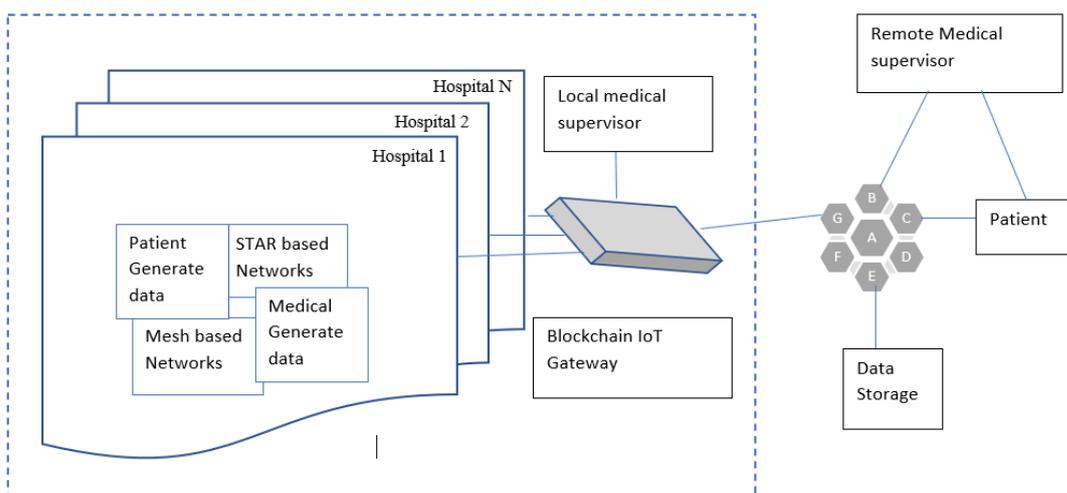
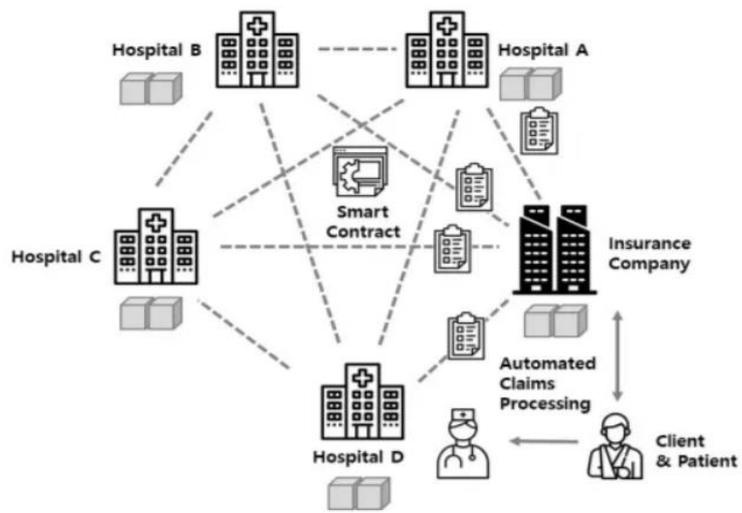Figure 1: Architecture for Blockchain in IoT healthcare

Figure 2: How it works