

Internet of Things and Blockchain-based framework for Coronavirus (Covid-19) Disease

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Abstract

The COVID-19 is an exponentially growing disease that has intentioned nations to use technologies to detect the coronavirus infection. Several nations are working greatly to fight against COVID-19. Many nations have been using a range of devices to combat the pandemic, seeking information about growth, monitoring as well as the leaking the confidential information of the residents. This research aims to assist infected people online using the Internet of Things (IoT) and Blockchain technologies through smart devices. IoT-based healthcare devices gather useful information, provide additional insight through symptoms and behaviors, allow remote monitoring, and simply give people better self - determination and healthcare. Blockchain allows the secure transfer of patient health information, regulates the medical distribution network. A four-layer architecture is proposed using IoT and Blockchain to detect and prevent individuals to be COVID 19. This research provides a framework for patients with COVID-19 infectious disease and recognizes health issues and diagnoses online. Smart devices such as smartphones can install any mobile apps such as Aarogya Setu, Tawakkalna, and so on. These applications can track COVID-19 patients properly. The installation of mobile apps on smart devices focuses to reduce the time and cost and increase the performance of the infectious patient's condition. A four-layer architecture is proposed using IoT and Blockchain technologies. Many research works focus on investigating, analyzing, and highlighting the affected individuals through guiding the COVID-19 infection. Eventually, various mobile apps are recognized and addressed in this paper.

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