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(57) Abstract :

Millions of people around the world has been affected by the COVID-19 pandemic. It has become a global issue. The major priority of the scientific community is to control this pandemic. . This invention describes a strong IoT based disinfectant tunnel as shown in fig (1) which is used to disinfect external surface of objects , clothes or even human skin to provide protection against COVID-19 in social or public places such as malls, schools, hospitals, airports , and offices. Primarily focusing on the significance, structural design and functioning of the tunnel. To make the tunnel cost-effective and sustainable solar panels and steel rods have been used. The disinfectant tunnel is highly efficient and automatic as it offers no contact disinfection or sanitization. This sensitization tunnel must detect human to sanitize, this invention illustrates a novel approach of using sensors for human detection and since this project is based on IoT as backbone so security model must be there to guard against malicious user. This invention also illustrates end-to-end security model. Sodium Hypochlorite solution is sprayed in the tunnels as It can be of two types namely dynamic and static and The person will be rotated inside the station for 10-15 min which is a static model with the disinfectant sprayed through nozzles arranged in a whole of the circumference. End-to-End Encryption model in IoT security is deployed which consists of authenticated encryption with forward secrecy and backward compatibility and it uses MAC , HMAC algorithms and multiple encryptions of blocks with modes of operations such as CBC.

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