ABSTRACT

The preliminary health tests of patients in the hospital are carried out by doctors. This requires them to be in contact with the patient which may unknowingly expose them to contagious diseases and it wastes their invaluable time for tests which are primitive in nature. This also increases the waiting time of other patients in the hospital and these lead times can stack up to delay urgent medical treatment of the patients with severe illness. The present guidelines of the World Health Organization amidst the ongoing pandemic of COVID-19 strongly suggest social distancing among humans to curtail the spread of the novel coronavirus. The objective of this project is to minimize the contact and the time of interaction between doctors and patients for preliminary tests which can be conducted autonomously by developing an Autonomous Smart Medical Assistant Robot for contactless preliminary testing of patients. This project uses Autodesk Fusion 360 software for the design and testing of the robot and Arduino IDE for control and programming. The robot can also be used as a companion for patients and to transport other medical supplies to both the doctor and the patients.

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