

IOT VIRTUAL DOCTOR ROBOT

Doctors are usually needed to work at every hospital and emergency centre every now and then. But it is not feasible for every doctor to be available at every place at desired time. The problem with video calling is that video calls need to be done from a PC or laptop on a desk. This limits the doctors capacity to view patients or around the operation theatre at will or even move through hospital rooms as needed.

The system makes use of a robotic vehicle with 4 wheel drive for easy navigation. The robot also includes a controller box for circuitry and a mounting to hold a mobile phone or tablet. The mobile or tablet is used to hold live video calls.

The doctor can use an IOT based application (BLYNK) to control the robot. The control commands sent online from the BLYNK application are received by the robot controller. The robot controller operates over wifi internet. The received commands are received on a real time basis and the robot motors are operated to achieve the desired movement commands. Also the root has other functions like a medicine box and a temperature sensor. The robot can measure temperature without the patient coming in contact.

COMPONENTS:

- DC Motor
- Wheels
- Wifi Module - ESP8266 Nodemcu
- MLX90614 IR sensor
- Base Frame
- Pole Rod
- L298 Driver Motor
- Switch and electrical Wiring
- Screws and Bolts

APPLICATIONS:

- Hospitals & Clinics
- Emergency Centers

ADVANTAGES:

- Doctors ability to be at anyplace anytime
- Doctors can move around in operation theatres
- Doctors can move around the patient with ease
- Doctors can see medical reports remotely via video calls
- Doctors can move around in other rooms at will.

DISADVANTAGES:

- Requires Battery Charging
- Need to attach a Tab or Mobile Phone