

Social Distancing ID Card

The importance of social distance concept was raised during the COVID period. But as COVID is not fully eradicated social distancing will still be prevalent in coming time. The problem with social distancing is people tend to forget about it every now and then. Remind every person each time is not feasible.

So here we develop a wearable social distancing ID card that will remind people to maintain social distancing whenever they are too close to some one else. This system will provide an automated way to ensure social distancing.

The system makes use of an ultrasonic sensor along with an atmega microcontroller, a buzzer, some basic electronics components and pcb board to develop the system. The system provides an automated social distancing system.

The ultrasonic sensor uses ultrasonic waves return time to measure the distance of any reflecting surface. This sensor data is constantly monitored by the microcontroller. Based on the sensor values the controller knows the distance of the person ahead from the person wearing it.

Now using this data the controller operates a buzzer in accordance to the distance. The buzzer buzzing pattern varies as per the distance of object from the person. The closer the person the higher the buzzing intensity.

This system ensures an automatic social distance ensuring ID card using ultrasonic sensor and atmega microcontroller.

Components

- Atmega 328 Controller
- Ultrasonic Sensor
- Battery
- Neck Strap
- Regulator Circuitry
- Switches
- LED's
- PCB Board
- Resistors
- Capacitors
- Transistors
- Cables and Connectors

Block Diagram

