

Online Weekly COVID 19 IDEathon Challenge **AKTU**

An alert mechanism
to stop touching our face

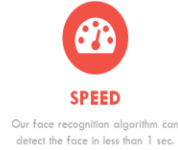
Created by : Isha Mudgal

College: KIET Group of Institutions

Branch: Computer science 2nd year , 4th semester



Model Features

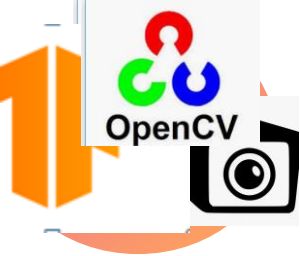


Device



Project Description

- In this , I am going to make a device which will monitor every action of human and raise an alarm when person is going to touch his face.
- You need to put this device anywhere you want in front of you.
- It can also be installed on pre installed camera
- This will be most feasible as it will increase accuracy.
- It can also be used as wrist watch in order to make anyone comfortable
- Thus two versions of the device will be shipped, one who wants to use as a wrist watch while other for the one who wants to keep or hang this device .



Design and working



- We are preparing an IOT device which consist of following items:
- Machine learning algorithms, computer vision libraries like opencv, cvlib, tensorflow and keras.
- Raspberry pi
- Pi Camera
- In order to make My system working , I only need a raspberry pi 3 module and pi camera .
- Whenever a person tries to put his hand on his face an alert message will sent to the person's email as well as a buzzer will raise in order to alert the person for the same.
- I will train my CNN model in such a way when two different detections that is hand and face are come in contact than show on screen alert.
- As we use this device again and again it will learn from its previous mistake and improve its accuracy
- If hands and face are going to contact , then an alert will raised
- If you do not want to use camera we can measure hand movement using accelerometer which measure hand movement in 3 axis and by calculating magnitude we can train similarly

