



CORONtine

With you in these tough times

OUR Stack

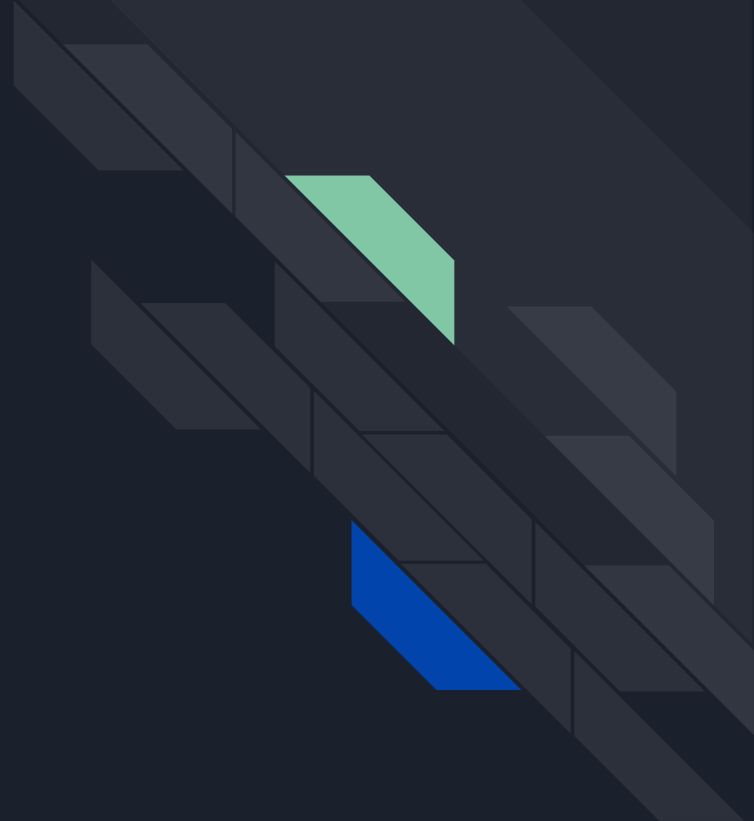
Tensorflow, Keras

opencv

Atmega328, Ultrasonic sensor

Django

Lots of motivation





Overview

CORONtine automates the process of segregating possible Corona Virus (COVID19) suspects by scanning them for common COVID19 symptoms without direct human involvement.

Our aim for developing CORONtine is to reduce the risk for our ground zero heroes by automating the task of scanning patients and and quarantining them if they show symptoms for COVID19.




Understanding the problem

In a pandemic like this when the whole country is in lockdown state, there are many security personnels, junior resident doctors, police men are doing the job of quarantining probable corona virus suspects to save our country from this pandemic. But providing proper protective gears for such large number of people is difficult which leaves them with simple masks while scanning thousands of people daily, out of which some might be suffering from this horrible disease. This lack in complete protective gear make even them vulnerable to COVID19. CORONtine aims to solve this problem by scanning people for common traits for COVID19 and let authorised people quarantine them without direct human involvement. This way probable victims of COVID19 can be segregated for making it easier for even the main senior doctors teams to identify patients of COVID19.



CORONtine objective

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- 1) Automatically place the patient in Scanning Zone using our Patient Positioning Module with Voice Assist
 - 2) Scanning the patient for common COVID19 symptoms like Coughing, Difficulty in breathing, Drowsiness, Running Nose
 - 3) If patients tests positive for above symptoms, taking chest X-ray of the patients for further surety.

People we aim to help

At places like airports, railways station, etc where continuous scanning of people are taking place most of the ground zero teams don't have proper protection kit other than a mask. CORANtine aims to help them. They include

- 1) Teams of junior resident doctors
- 2) Security Personnels
- 3) On duty policemen
- 4) On duty staff

And our whole nation



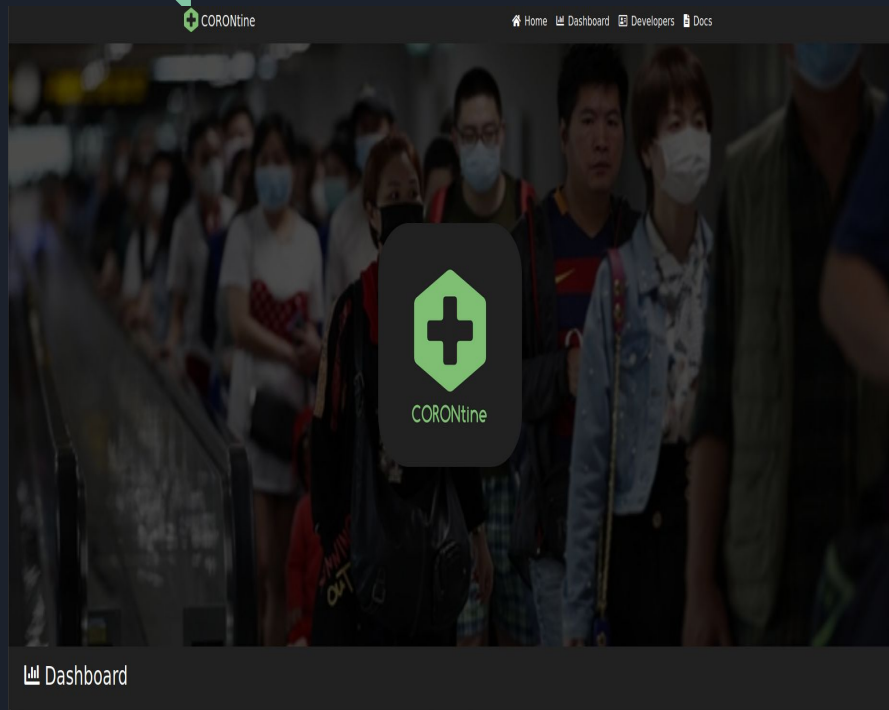


How CORONtine works

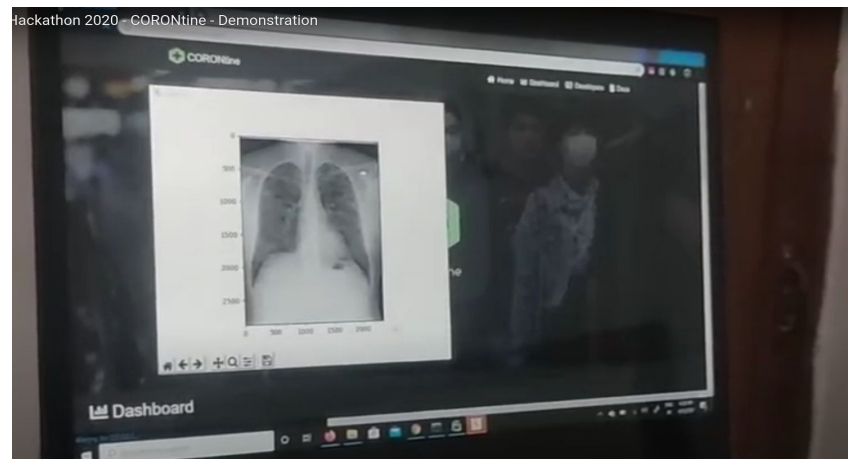
CORONtine is a hardware and software integrated platform where we automate the process of screening the patients.

- ❖ Firstly the hardware module consisting of UV sensor positions the patient to the desired location.
- ❖ Once this step is over, scanning of basic symptoms starts.
- ❖ If the patient shows symptoms for COVID19, second step of test is performed by taking chest X-ray of the patient.
- ❖ If the congestion in lungs related to COVID19 are recognized , immediate alert for quarantining the patients are generated. Once the warning is generated, professional teams can be informed for further testing of the patient.

How CORONtine looks like!



Hackathon 2020 - CORONtine - Demonstration





We are happy to to inform that our prototype is working well. Due to lack of resources we were not able to integrate X-ray machine with our model . We will happy if some organizations are ready to take up this project for serving mankind.

Thank you

Team - Dev.ino