Department of Electronics and Communication Engineering

MAJOR PROJECT

Abstract Proforma

Academic Year: 2021-22

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Year & Branch: IV Year ECE I Semester			Section: A
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Name of the Guide	E SREENIVASULU (Assistant Professor)		
Area (Domain) of the Project	Machine Learning		
Title of the Project	Implementation of Face Mask Detection using Open CV		
Tools Required	1.Jupiter Notebook. 2.Camera. 3.Open CV		
Abstract			

COVID-19 pandemic has rapidly increased health crises globally and is affecting our day-to-day lifestyle. Many measures are recommended by WHO to control the infection rate and avoid exhausting the limited medical resources. A motive for survival recommendations is to wear a safe facemask, stay protected against the transmission of coronavirus. By wearing a facemask, the most effective preventive care must be taken against COVID-19.

Monitoring manually if the individuals are wearing face mask correctly and to notify the victim in public and crowded areas is a difficult task. This project approaches a simplified way to achieve facemask detection and notifying the individual if not wearing facemask.

Our project uses image processing and machine learning techniques. We collect data of images of face with and without masks and then image processing applied to it. We are giving data set of samples containing images with and without mask. So that we train the data using machine learning techniques like convolution neural networks. We use image processing technique violajones algorithm to take images as input. The output will be of red colour bounded box if the detected face is without mask and it sends the information to person and higher authorities too. If the person is wearing mask the bounded box will be of green colour. It indicates that it is safe now.

The system runs in real-time and detects if an individual face has a facemask, if not then notifies the person-in-charge that the individual has not been equipped with a mask.

Keywords: Machine Learning, Open CV, Image Processing