

## INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

## Face Mask Detection with a Reminder System

(Mask-Catcher)

A Thesis by

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## Abstract

Everyone's way of life is changing all around the world. During such changes, everyone needed to wear a mask. Due to the vast number of people affected by the coronavirus pandemic, detecting those who are not wearing masks is challenging. This project was implemented for a company. But as it is now not a necessary thing to wear a mask in companies, this system can be used in places like airports. Image processing and deep learning are used to recognize people's faces and categorize them into two groups: those wearing masks and those without masks. With the support of this project, a person who is responsible for monitoring people can sit at a remote location and still monitor and give instructions. Various Python libraries, including OpenCV, Tensor Flow, and Keras, were used. MobileNetV2, which is a Convolution Neural Network (CNN) architecture in Deep Learning, was used to train the models for this project.