VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

BELAGAVI

A PROJECT REPORT ON

FACE MASK DETECTION USING MACHINE LEARNING

Submitted in partial fulfillment for the award of Degree of,

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

By

DHEERAJ KRISHNA DEVADIG	**4AL17CS028**
GOWDA ROSHNI SHIVPRAKASH	**4AL17CS031**
MHASKE POOJA	**4AL17CS050**

Under the Guidance of

Ms. Megha D Hegde

ASSISTANT PROFESSOR

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MOODBIDRI-574225, KARNATAKA

2020 – 2021

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI D.K. -574225

KARNATAKA

ALVA'S

Education Foundation

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the Project entitled "FACE MASK DETECTION USING MACHINE LEARNING" has been successfully completed by

DHEERAJ KRISHNA DEVADIG	**4AL17CS028**
GOWDA ROSHNI SHIVPRAKASH	**4AL17CS031**
MHASKE POOJA	**4AL17CS050**

the bonafide students of **Department of Computer Science & Engineering, Alva's Institute of Engineering and Technology** in partial fulfillment of 8th semester, BACHELOR OF ENGINEERING in **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library.

Ms. Megha D Hegde
Project Guide

Dr. Manjunath Kotari
Head of the Department
Dept. Of Computer Science & Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

Dr. Peter Fernandes
Principal
PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225, D.K

External Viva

Name of the Examiners	**Signature with Date**
1.	
2.	

ABSTRACT

Changes in the lifestyle of everyone around the world. In those changes wearing a mask has been very vital to every individual. Detection of people who are not wearing masks is a challenge due to Outbreak of the Coronavirus pandemic has created various the large number of populations. This project can be used in schools, hospitals, banks, airports, and etc. as a digitalized scanning tool. The technique of detecting people's faces and segregating them into two classes namely the people with masks and people without masks is done with the help of image processing and deep learning. Face mask detection has a range of application from capturing the movement of the face to facial recognition which at first requires face to be detected with very good precision. Face detection is more relevant today as it is not only used on images, but also in video application like real-time surveillance and face detection in videos.