MACHINE LEARNING

(FACE MASK CLASSIFIER)

Summer Internship Report Submitted in partial fulfillment of the requirement for undergraduate degree of

Bachelor of Technology

In

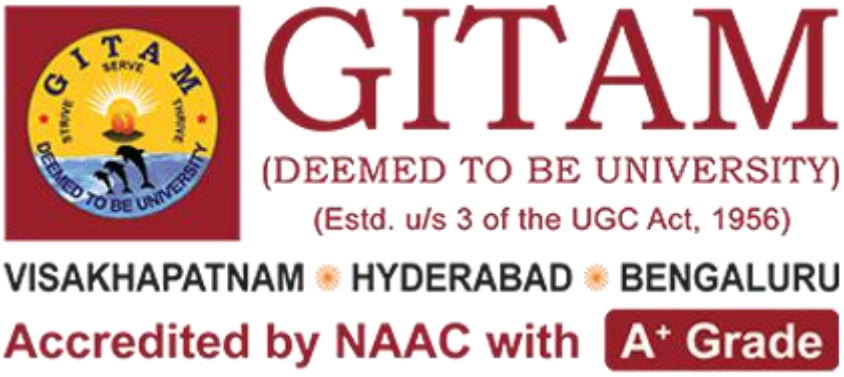
COMPUTER SCIENCE AND ENGINEERING

By

P SAI SANTOSHI RAMYA

221710309041

Under the Guidance of



Department Of COMPUTER SCIENCE AND ENGINEERING

GITAM School of Technology

GITAM (Deemed to be University)

Hyderabad-502329

July 2020

DECLARATION

I submit this industrial training work entitled **"FACE MASK CLASSIFIER"** to GITAM (Deemed To Be University), Hyderabad in partial fulfillment of the requirements for the award of the degree of **"Bachelor of Technology"** in **"Computer Science and Engineering**". I declare that it was carried out independently by me under the guidance of , GITAM (Deemed To Be University), Hyderabad, India.

The results embodied in this report have not been submitted to any other University or Institute for the award of any degree or diploma.

PLACE: Hyderabad P.SAI SANTOSHI RAMYA

DATE: 221710309041

GITAM (DEEMED TO BE UNIVERSITY)
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CERTIFICATE

This is to certify that the Industrial Training Report entitled **"FACE MASK CLASSIFIER"** is being submitted by P.SAI SANTOSHI RAMYA(221710309041) in partial fulfillment of the requirement for the award of **Bachelor of Technology** in **Computer Science & Engineering** at GITAM(Deemed To Be University), Hyderabad during the academic year 2019-20.

It is faithful record work carried out by her at the **Computer Science & Engineering Department**, GITAM University Hyderabad Campus under my guidance and supervision.

Assistant Professor
Department of CSE

Professor and HOD
Department of CSE

ACKNOWLEDGEMENT

Apart from my effort,the success of this internship largely depends on the encouragement and guidance of many others.I take this opportunity to express my gratitude to the people who have helped me in the successful completion of this internship.

I would like to thank **Dr. N. Siva Prasad**,Pro Vice Chancellor,GITAM Hyderabad and Principal **Dr.Seetharamaiah**, GITAM Hyderabad.

I would like to thank respected **Prof.S Phani Kumar**, Head of the Department of Computer Science and Engineering for giving me such a wonderful opportunity to expand my knowledge for my own branch and giving me guidelines to present an internship report. It helped me a lot to realize what we study for.

I would like to thank the respected faculties Mr. who helped me to make this internship a successful accomplishment.

I would also like to thank my friends who helped me to make my work more organized and well-stacked till the end.

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ABSTRACT

Machine learning algorithms are used to predict the values from the data set by splitting the data set into train and test and building machine learning algorithm models. Face Detection has evolved as a very popular problem in Image processing and Computer Vision. Many new algorithms are being devised using convolutional architectures to make the algorithm as accurate as possible. These convolutional architectures have made it possible to extract even the pixel details. We aim to design a binary face classifier which can detect any face present in the frame irrespective of its alignment. We present a method to generate accurate face segmentation masks from any arbitrary size input image.In order to effectively prevent the spread of COVID19 virus, almost everyone wears a mask during the coronavirus epidemic. This almost makes conventional facial recognition technology ineffective in many cases, such as community access control, face access control, facial attendance, facial security checks at train stations, etc. Therefore, it is very urgent to improve the recognition performance of the existing face recognition technology on the masked faces. Most current advanced face recognition approaches are designed based on deep learning, which depend on a large number of face samples.

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