AN IOMP PROJECT REPORT

on

VIDEO BASED ABNORMAL DRIVING BEHAVIOUR DETECTION USING DEEP LEARNING FUSION

Submitted to

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

In partial fulfilment of the requirement for the award of the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

MANGADHUDLA HARSHA	**:**	**217Y1A0523**
KOTTURI PUJITHA	**:**	**227Y5A0505**

Under the Guidance of
Mrs. Pujitha, Assistant Professor

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY & MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
NAAC Accredited Institution with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

AUGUST, 2024

MARRI LAXMAN REDDY
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the project work entitled "**VIDEO BASED ABNORMAL BEHAVIOUR DETECTION USING DEEP LEARNING FUSION**" work done by **MANGADHUDLA HARSHA(217Y1A0523)and KOTTURI PUJITHA(227Y5A0505)** students of Department of Computer Science and Engineering, is a record of Bonafide work carried out by the members during a period from January ,2024 to August,2024 under the supervision of **Mrs**. **PUJITHA(Assistant professor)**. This project is done as a fulfilment of obtaining Bachelor of Technology Degree to be awarded by Jawaharlal Nehru Technological University Hyderabad, Hyderabad.

The matter embodied in this project report has not been submitted by us to any other university for the award of any other degree.

MANGADHUDLA HARSHA **KOTTURI PUJITHA**

This is to certify that the above statement made by the candidate(s) is correct to the best of my knowledge.

Date: (Mrs.Pujitha)

The Viva-Voce Examination of above students, has been held on……

Head of the Department External Examiner

Principal/Director

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DECLARATION

We hereby declare that the project entitled **"VIDEO BASED ABNORMAL BEHAVIOUR DETECTION USING DEEP LEARNING FUSION"** is the work done during the period from **January 2024 to August 2024** and is submitted in the partial fulfilment of the requirements for the award of degree of Bachelor of technology in computer Science and Engineering from Jawaharlal Nehru Technology University, Hyderabad. The results embodied in this project have not been submitted to any other university or Institution for the award of any degree or diploma.

Mangadhudla Harsha(217Y5A0523)
Kotturi Pujitha(227Y5A0505)

ACKNOWLEDGEMENT

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We are very much grateful to my Project Coordinator**, Dr. S Prathap (Associate Professor),** Computer Science of Engineering, MLRITM, Dundigal, Hyderabad, who has not only shown utmost patience, but was fertile in suggestions, vigilant in directions of error and has been infinitely helpful.

We would like to express my sincere gratitude to my guide **Mrs. Pujitha(Assistant Professor)**, Department of computer science and engineering, for her excellent guidance and invaluable support, which helped me accomplish the B. Tech degree and prepared me to achieve more life goals in the future. Her total support of my dissertation and countless contributions to my technical and professional development made for a truly enjoyable and fruitful experience. Special thanks are dedicated for the discussions we had on almost every working day during my project period and for reviewing my dissertation.

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On a more personal note, I thank my **beloved parents and friends** for their moral support during the course of our project.

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ABSTRACT

Nowadays, accidents occur during drowsy road trips and increase day by day; It is a known fact that many accidents occur due to driver fatigue and sometimes inattention, this research is primarily devoted to maximizing efforts to identify drowsiness. State of the driver under real driving conditions. The aim of driver drowsiness detection systems is to try to reduce these traffic accidents. The secondary data collected focuses on previous research on systems for detecting drowsiness and several methods have been used to detect drowsiness or inattentive driving.

Our goal is to provide an interface where the program can automatically detect the driver's drowsiness and detect it in the event of an accident by using the image of a person captured by the webcam and examining how this information can be used to improve driving safety can be used. A vehicle safety project that helps prevent accidents caused by the driver's sleep. Basically, you're collecting a human image from the webcam and exploring how that information could be used to improve driving safety. Collect images from the live webcam stream and apply machine learning algorithm to the image and recognize the drowsy driver or not. When the driver is sleepy, it plays the buzzer alarm and increases the buzzer sound. If the driver doesn't wake up, they'll send a text message and email to their family members about their situation. Hence, this utility goes beyond the problem of detecting drowsiness while driving. Eye extraction, face extraction with dlib.

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