VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

A PROJECT REPORT ON

"AN INDEPENDENT AUTOMATIC SYSTEM TO DETECT THE PRESENCE OF VIOLENCE USING DEEP LEARNING TECHNIQUES"

Submitted in partial fulfillment for the award of Degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

By

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CERTIFICATE

This is to certify that the project entitled "AN INDEPENDENT AUTOMATIC SYSTEM TO DETECT THE PRESENCE OF VIOLENCE USING DEEP LEARNING TECHNIQUES" has been successfully completed by

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bonafide students of **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2023–24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Creating a system that can automatically detect violence in videos using advanced deep learning techniques. By utilizing convolutional neural networks (CNNs) for image and video processing the system can effectively detect violent actions. The system utilizes deep neural networks trained on datasets of violent and non-violent actions to automatically recognize patterns indicative of violence in video streams. Upon detecting potential instances of violence, the system can trigger appropriate responses, such as alert notifications in Gmail. This technology aims to assist law enforcement and security personnel in monitoring and responding to violent incidents more effectively, ultimately contributing to public safety. The successful deployment of this technology could significantly improve the efficiency and effectiveness of public safety measures, reducing response times to violent incidents and ultimately contributing to the prevention and deterrence of violence in various contexts. Ongoing research in this area focuses on further refining the model's accuracy, scalability, and adaptability to different surveillance scenarios and operational environments. Man aim of our project is to detect violence in uploaded videos using advanced deep learning techniques. By analysing visual cues and patterns in video footage, our system can identify potentially violent actions or behaviours.