VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi – 590018

A Mini Project Report

on

"Face-Recognition Attendance System Using Python"

submitted in partial fulfillment of the requirement for the award of degree of

BACHELOR OF ENGINEERING

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

AMC ENGINEERING COLLEGE

Approved by AICTE, Permanently Affiliated to VTU, Belagavi, Accredited by NAAC & NBA

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CERTIFICATE

This is to certify that the Mini Project report entitled **"Face Recognition Attendance System using Python"** is a bonafide work carried out by Rahul Poojary **(1AM21EC064),** Varsha B R **(1AM21EC095),** Sudin V **(1AM21EC083)** in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for internalassessment have been incorporated in the report. The Mini Project report has been approved as it satisfies the academic requirements in respect of mini project prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Dr. Madhukar B N	**Dr. Shivakumar G**	**Dr. K. Kumar**

External Viva

Name of the Examiners: **Signature with Date:**

1.

2.

DECLARATION

We hereby declare that the Mini Project report entitled "Face Recognition Attendance System using Python" has been carried out by us under the guidance of our guide, Dr. Madhukar B N, Assistant Professor, Department of Electronics and Communication Engineering, AMC Engineering College, Bengaluru and submitted in partial fulfilment of the course requirements for the award of the degree in Bachelor of Electronics and Communication Engineering during the year 2023-24. The matter embodied in this report has not been submitted to any other university or institution for the award of any other degree or diploma.

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ABSTRACT

This mini-project explores the implementation of a facial recognition attendance system using Python, aiming to automate and improve the accuracy of attendance tracking in organizational settings. The system leverages state-of-the-art computer vision and machine learning techniques to identify and verify individuals based on their facial features.

The core components of the system include face detection, feature extraction, and recognition algorithms, all implemented using popular Python libraries such as OpenCV, dlib module, and face recognition. The system captures real-time video streams or images, detects faces within them, and compares the detected faces against a pre-registered database of authorized users to mark attendance.

The project demonstrates the effectiveness of facial recognition technology in automating attendance management, reducing manual effort, and minimizing errors. It also highlights the importance of continuous improvement and adaptation of machine learning models to maintain high accuracy and reliability.