

BVRIT HYDERABAD

College of Engineering for Women Department of Information Technology Mini Project - Academic Year 2022-23

TEAM 9

FACE RECOGNITION BASED ATTENDANCE SYSTEM USING MACHINE LEARNING

Abstract

Passwords were the only method available to identify individuals. Passwords became obsolete due to obtaining password information and hacking into accounts. The face recognition system is a high-speed and reliable technology. It is an advanced, automated, and sensible identification system that can identify a person by facial features. It aims to build a class attendance system which uses the concept of face recognition as existing manual attendance. This system is used in many government offices, firms, banks, and other places.

Modules

Face Detection
Face Encoding
Face Recognition
Marking attendance

Architecture Features Extraction & Single Person Face Data base creation Face area detection Training (Texture Images and naming ATTENDANCE MARKING SYSTEM: CLOSED LOOP SYSTEM Preprocessing and Image with person Multi face detection Cropping and face feature extraction rejection (Texture features) Trained Features Classification of faces Identified faces Unidentified faces

Tools and Technologies

- Python 3.6
- VisualStudio Code
- face_recognition
- OpenCV
- Numpy
- Pandas

Conclusion and Future Scope

A multi facial recognition based attendance system uses facial recognition technology to identify and verify multiple faces using the person's facial features and automatically mark attendance. We have completed recording and storing the data in real-time and attendance will be marked if the detected face is found in the database.

Github links

- 1. https://github.com/Mrunalini15
- 2. https://github.com/19WH1A1210
- 3. https://github.com/19WH1A1211
- 4. https://github.com/tejasri192001

Team



P. Mrunalini

19WH1A1210

G. Raaiitha





19WH1A121 P. Tejaswini

19WH1A1237 R. Tejasri