

Facetrace Attendance

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Abstract: *It's a system designed to introduce modernization in attendance management by using facial recognition. Existing attendance systems which include manual registers or RFID cards are highly erroneous, fraud-prone and inefficient. This project offers a contactless, automated, accurate attendance management.*

System created with the use of the Django framework is a scalable and flexible system that integrates cutting-edge facial recognition libraries like OpenCV or similar tools. The system captures a live video stream from a camera, detects them in the real-time work and matches them with the pre-registered database of users. Attendance of the person is automatically recorded in the DB once the match is confirmed.

Source code of the project is modular and well-documented, it can be easily modified and extended by developers. The project presents real practical use of machine learning and AI principles in solving real-life tasks. It demonstrates how machine learning can be used in web technologies to increase the effectiveness and productivity of everyday activities.

Keywords: Face detection, Attendance systems, Haar Cascade Classifier, Local Binary Pattern Histogram.

