

**Abstract**

The report contains the contents of the work done towards the project titled Face Recognition Attendance System. It aims to simplify and automate the process of attendance management by using facial recognition technology. The main focus of the project is to create a system that eliminates the need for traditional attendance methods, such as manual entry or card swiping, by identifying individuals through their facial features. The system is designed to capture facial images, store them securely in a database, and recognize individuals with high accuracy to mark their attendance. A key feature is its ability to prevent duplicate entries and notify users of successful attendance logging. Targeted primarily at educational institutions and workplaces, the system addresses common challenges such as errors in manual processes, time consumption, and security concerns. By providing a user-friendly interface, the system ensures ease of use for administrators and users alike. This project demonstrates how technology can be leveraged to enhance efficiency, reduce administrative workload, and ensure accurate attendance tracking, making it a practical and scalable solution for modern organizations.

**Keyword**

Face Recognition, Attendance Management System, Flask Web Application, OpenCV, LBPH Algorithm, Real-time Face Detection, MySQL Database, Duplicate Entry Prevention, Automated Attendance Logging, Student Registration, Model Training, Image Preprocessing, Facial Feature Extraction.