**MINI PROJECT – I**

**(2018-19)**

# FACE DETECTION BASED ATTENDANCE

# MANAGEMENT SYSTEM

# 

**SYNOPSIS**



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**About the Project:**

Face recognition is an important application of Image processing owing to its use in many fields. Identification of individuals in an organization for the purpose of attendance is one such application of face recognition.The purpose of developing attendance management system is to computerize the traditional way of taking attendance. Automated Attendance Management System performs the daily activities of attendance marking and analysis with reduced human intervention. The prevalent techniques and methodologies for detecting and recognizing face fail to overcome issues such as scaling, pose, illumination, variations, rotation, and occlusions. The proposed system aims to overcome the pitfalls of the existing systems and provides features such as detection of faces. Better accuracy is attained in results as the system takes into account the changes that occur in the face over the period of time . The system is tested for various use cases. The system is tested under varying lighting conditions, various facial expressions, presence of partial faces and presence or absence of beard and spectacles. this project reduces the chances of fake attendance as it save attendance after recognization of the saved faces

**Motivation: ‘**

The motivation behind this project is to make attendance management system efficient and secure as the system saves attendance after recognization of the face which is stored in the database.

**Future Prospects:**

Further modification can be done in the system such as modifying the attendance after taking attendance.Viewing the past record of the attendance of the students can be graphed and analysed.

**Requirements:**

1. **Hardware:**

* **Hard disk – 5GB**
* **RAM – 1GB**
* **Webcam**
* **Processor(intel core i3)**

1. **Software:**

* **Python**
* **Numpy**
* **Open cv**
* **Matplotlib**