RAJKIYA ENGINEERING COLLEGE KANNAUJ

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Project Proposal

on

Smart Attendance System

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1   Introduction

The current attendance system in most of the educational institution is paper based, wherein the students are expected to sign an attendance sheet. This system has several disadvantages like:

- The students can mark attendance of their fellow classmates without being caught.
- Punctuality of individuals cannot be recorded.
- Time consuming.
- It can be lost easily.

2   Motivation

Attendance marking in a classroom during a lecture is not only an onerous task but also a time consuming. Due to an unusually high number of students present in class during the lecture there will always be a chance of proxy attendance.

So, for removing these problems, we can make the attendance using face recognition algorithms. It will record the student`s attendance by using face recognition technology.

3 Methodology

- Dataset Collection: The dataset for this project is being take from class student image.

- Image Enhancement is performed on the dataset for to achieve greater accuracy.

- Training a model to detect face: A default OpenCV module was used to obtain faces followed by training the model using LBPH (**Local Binary Pattern Histogram)** face recognizer.

- Real Time Face detection is performed and mark the attendance.

4 Conclusion

Face recognition systems are part of facial image processing applications and their significance as a research area are increasing recently. Implementations of system are crime prevention, video surveillance, person verification, and similar security activities.

The attendance system is one of the important implementations of face recognition. Attendance marking in a classroom during a lecture is not only an onerous task but also a time consuming. Due to an unusually high number of students present in class during the lecture there will always be a chance of proxy attendance.