



Department of Computer Science,
National University of Computer and Emerging Sciences,
Islamabad

Attendance project with OpenCV

Name: Talha
Roll Number: i192049

Digital Image Processing
Dr. Akhtar Jamil



Introduction

An Attendance project that will use a camera to detect faces and record the attendance live in an excel sheet and then it will send an email to the attendees that they have been marked present.[1] The idea of this project is to automate the manual work of taking attendance using OpenCV and Python.[2] Here, faces will be recognized using a face recognition algorithm. The processed image will then be compared against the existing record and then attendance marked in the database accordingly. It will also have an email notification system.

Literature Review

I have mentioned all those sites and research papers which have implemented a similar project like this before.

<https://www.computervision.zone/courses/face-attendance/>

<https://github.com/kmhmunin/Face-Recognition-Attendance-System>

<https://github.com/PrudhviGNV/Face-Recognition-Based-Attendance>

<https://github.com/shumbul/Smart-Attendance-System>

<https://github.com/Saurabh-Daware/Face-Recognition-Attendance>

<https://github.com/KhomZ/Face-Recognition-Based-Student-Attendance-System-in-Python-using-OpenCV-with-Tkinter-GUI->

https://github.com/Spidy20/Attendace_management_system

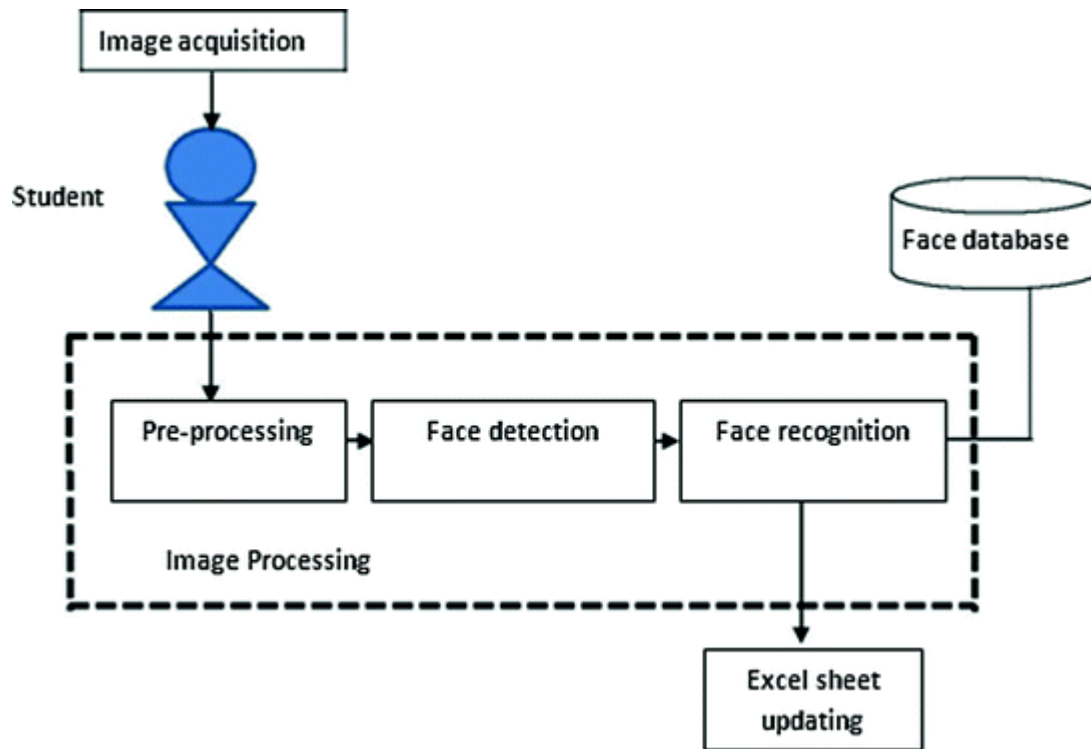
Data Set

The dataset that I will use in this project will be the images of famous personalities. I will take this data from the internet and it is easily available there. Moreover, if I have to take the attendance of my own class then I will have to take the pictures of all the students of my class.



Methodology

Some basic steps involved in this project are shown below. One thing that is missing in this project is the email notification system that will notify the attendee that he or she had been marked present.



Some basic steps involved in this project are:

- First i will train the machine on some images of students.
- then if the camera detects the same image which is present in the face database then it will mark that person present else it will mark that person absent.
- If the student is present he will receive an email notification for being present.
- Else if the student is not present he will recieve the email for being absent.

Software Packages

Name	Tasks
Talha	I am going to do this project alone so all the tasks that will be implemented will be my own efforts.



Reference

- [1] <https://www.computervision.zone/courses/face-attendance/>
- [2] <https://github.com/PrudhviGNV/Face-Recognition-Based-Attendance>