

# Attendance Posting Through Face Recognition

Angulakshmi M, Deepa M, Sudha S, Brindha K, Rathi R



**Abstract:** Now a day's face detection technology is widely used technique. It attracted attention for much valuable application in the market such as face recognition system. Biometric authentication is most important method in security system. Universally used Biometric fingerprint scanner can be bypassed quite easily. It can be broke easily. Biometric face recognition has been introduced to improve the security of a system. Methods such as Motion based and texture based are used for biometric face recognition. But these methods have less robustness and poor generalization ability. But apart from further security issues, this paper presents a new approach to make attendance of the student in class by the face recognition. Now a day's attendance system is usually done manually or by the biometric fingerprint. Those are mistaken and tedious techniques. So this technique records the student's participation in classroom consequently and provide facility for teachers for obtaining the data of the student effectively using log to check in and out time

**Index Terms :**Human Computer Interaction, Biometric Authentication, Motion Based Method.

## I INTRODUCTION

The various recognition systems such as e.g. signature acknowledgment, facial acknowledgment, emerge as one of the greatest development in the face recognition system[1][2][3]. These situation arise because these intellectual techniques is used widely in many the big-administration for making decision that helps to improve the execution and effectiveness of system[4][5][6]. Then again, for an association to be effective, fast and extraction method for recognition of the human being who comes under these association system[7][8][9] . Biometric recognition can possibly turned into an essential piece of numerous identification frameworks utilized for assessing the execution of those individuals working inside the association. In spite of the fact that biometric advances are so high that the field is has developed its network for in various technical field but

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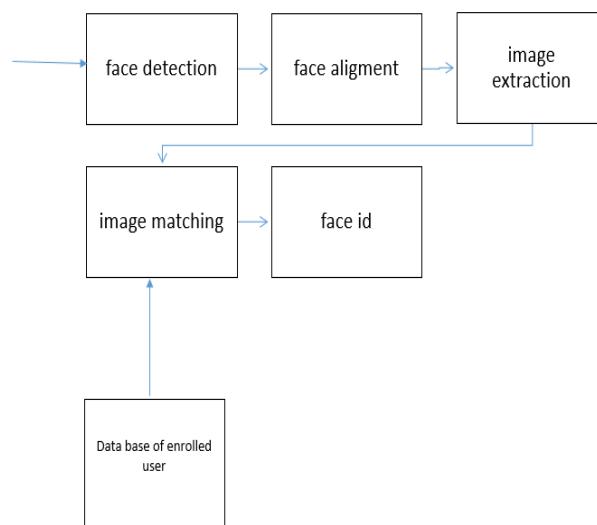
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still lack in providing accurate result for automated human recognition[10][11][12].

## II. FACE RECOGNITION SYSTEM FLOW



**Fig 1. A .Face Detection**

This process is use for detecting the face and removes area of face from the remaining image background[13][14][15].

### A. Face Alignment

The proposed procedure concentrate on searching for good area and face standardization ; Generally identification step does not consider face position The step plots the various parts of face for example, layout, eyebrows, lips, etc [17][18]

Thereafter standardization as for geometrical changes with photometrical possessions, for example, enhancing and depressing scale occur.

### B. Image Removal

Later the historical binary phases, climax withdrawal is done consequential near operative data which is supportive for knowing amid expressions of dissimilar persons and steady by reverence to the vayrious verities.

### C. Face Similar

The detached gears are equated thru those kept in the record, and picks are ended giving to faith in the equal score

### D. Human-ComputerInteraction:

Various human computer interation games are available

### E. Smooth Cards and Expression ID:

Client confirmation put away esteem security, identifications, voters' enrollment. terminals, restorative records, web and intranet security, terrorist alarm.



# Attendance Posting Through Face Recognition

### III. PROBLEM DEFINITION-

Each day an address, segment or research center begins the instructor or showing Assistant defers the address to record understudies' participation. This is an broad process and involves a parcel of time and effort, particularly in the case that it is an address with an immense number of understudies. It additionally has a ton of aggravation and intrusion when an examination is taken. Also the participation sheet is subjected to harm and misfortune while been going on between various understudies of educating staff. What's more, when the quantity of understudies selected in a specific track is fantastic, the speakers tend to call two or three understudies name aimlessly which is not a reasonable understudy assessment handle either. At final, these participation records are used by the staff to screen the understudy's participation rates. This operation could be uncomplicated and successful with a minuscule number of understudies yet, then again managing the records of countless frequently prompts human blunder.

### IV. PROPOSED SYSTEM-

We proposes answers for all the indicate issues by giving automatically participation framework to every one of the understudies that go to a specific lecture, labs, research facility or examination at its particular time, in this way time is save time, intensity and reducing errors and disturbance. Another specific or favorable level concerning exams, is the point at which the teacher or the counselor incidentally misfortunes an exam paper or the understudy lies about going to the exam, there will be a record of the understudies' participation for the exam around then, along these lines ensuring both speaker's and understudies' rights. What's more, a robotized execution assessment would give more precise and dependable results maintaining a strategic distance from human mistake.

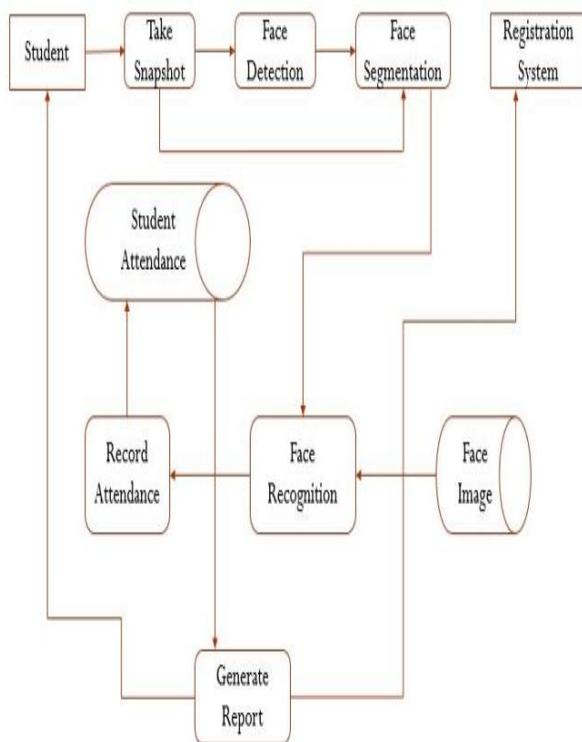


Fig 2. Setup for Automatic Attendance System

The main goal of this scenario is given to automatically attendance scenario that is sensible, trustworthy and remove all kind of errors which is occur in this scenario and time something went wrong established attendance scenario. A second goal is to present a scenario that can surely accurate to judge students' performance relying upon their recorded participation rate.

### V. SYSTEM REQUIREMENTS-

Breaking down client prerequisites and requirements is an indispensable assignment in any framework advancement process. End clients must be the primary worry of the framework planner with a specific end goal to create a substantial, valuable and client fulfilling framework. This segment looks at and examines the necessities and requirements of the conceivable distinctive framework end clients.

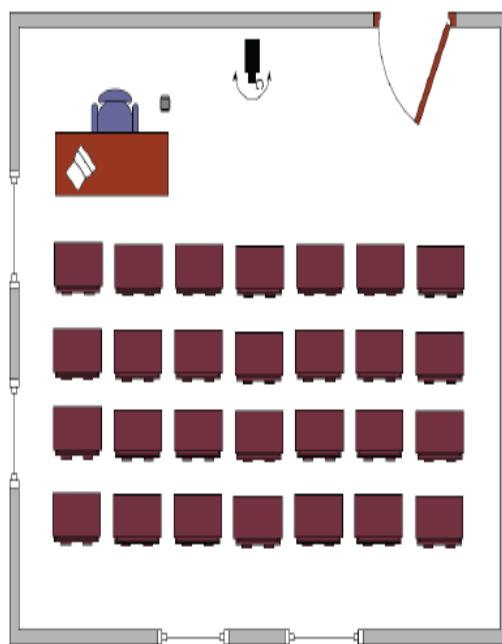


Fig 3. Classroom Setup

#### A. Student Requirement:

Students should keep their attendance information. For this, they will have their ID and Password. They will have to login when they will attend the class for see the attendance is taken or not. By this login system they can also see their progress of course.

#### B. Faculty's Requirement:

Faculty needs such a system or application which can compress their extra work like attendance or caring of attendance information. By the help of this system, faculty can able to see the progress of student easily without any extra work. Faculty have their personal ID and password by which they can also login same as student login. All system will start after the faculty login. They can also see the student progress of their own system in the login. If faculty entered wrong details, then an error page will be generate and again ask for ID and password. There is an option for forget password.

If faculty forget password then it will send the information to administration department after this it will send new password to faculty Email ID.

#### C. Administrator Requirement:

Faculty's ID, password and student's ID, password all are given by administrator. So, administrator should have the power to give all this information to their faculty and student and handle any problem which will occur in this. Administrator can also provide new ID or password if anyone will forget their own.

#### VI. LITERARY REVIEW-

There are 3 basic approaches for face detection which are: i. Color Segmentation, ii. Template matching, iii. Feature based detection techniques. Various previous face detection strategies have been proposed based on these 3 approaches and each has their own merits and demerits. A key element of enhancing the nature of instruction is having understudies go to classes consistently. Generally understudies are empowered to go to classes utilizing participation focuses which toward the end of a semester constitute a part of an understudies' last grade. Be that as it may, customarily this presents extra exertion from the instructor, who must try to effectively stamp going to understudies, which in the meantime squanders a lot of time from the educating process. Besides it can get a great deal more confused on the off chance that one needs to manage vast gatherings of understudies.

#### VII. IMPLEMENTATION-

We tried this method in the mat lab (parallel processing) we done almost 50% of the code we have presented an implementation of three dimensional coupled with face detection spoofing technique for face livens detection. This approach makes face recognition system secure to various types of face detection still remains a challenge for the face recognition systems. But unfortunately we didn't complete our implementation.

#### VIII. CONCLUSION-

In this system we have try to implement a attendance system for a lecture, section or research center or a laboratory by which teacher or lecturer have a record thier student attendance. It saves time and effort, particularly on the off chance that it is a class with large number of student. Although the complete system is implemented in MATLAB but unfortunately the output is not in our favor. This attendance framework demonstrates the better use of facial recognition procedures with the end goal of student attendance and for the further process this record of student can be used in exam related issues.

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