

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 10, Issue 6, June 2022



Impact Factor: 8.165





| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | | Impact Factor: 8.165 |

|| Volume 10, Issue 6, June 2022 ||

| DOI: 10.15680/IJIRCCE.2022.1006135 |

### Face Recognition Attendance Monitoring System

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**ABSTRACT:** The main goal and objective of this automated attendance system of face recognition is to present face recognition in real time environment for educational institutes or an organization to see and mark the attendance of their students and employees on a daily basis to keep track of their presence. But, manual attendance is a tedious task, consumes a lot of time, and the data is not in a proper format. This project can be a saviour for faculties and institutes. The system will mark and record the attendance in any environment. This system is purely automated and accordingly attendance will be marked, improving the accuracy to great extent and finally the attendance report will be generated.

#### I. INTRODUCTION

Attendance plays a vital role in determining academic performance of students in schools and colleges. Manual maintenance of attendance are inefficient due to the following reasons:

- It takes down lot of lecture hours
- Prone to delegates or impersonations

To resolve this problem, many attendance monitoring system have been introduced. Jain et.al developed a desktop grounded operation in which scholars are given attendance by clicking a checkbox coming to their name and also by clicking the register button to mark their presence. Bhalla et.al have proposed blue- tooth grounded attendance system. Application software installed in mobile phone enables to register the attendance via blue-tooth connection and transfer the announcement to the educator. Still, utmost of these systems have separate limitations in portability, authenticity or cost. So a bid to overcome the feelings of the separate systems leads to the development of a Face Recognition Attendance systems grounded on face recognition. Unlike other biometric and non biometric means of attendance systems, face recognition technology stands altitudinous with its unique advantages. Every pupil has a separate facial identity and it can't be faked but bare delegates.

#### II. METHODOLOGY

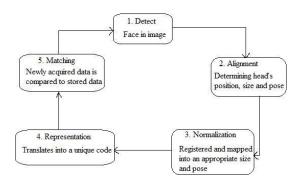
Having a videotape sequence as theinput to the system the details of facediscovery, facial features birth,normalization of facial features and quality score assignment are described.



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#### **FACE DETECTION:**

For better delicacy of face- log generation, we employed face shadowing fashion. All we did was first descry the face using Viola & Jones idea as described by and also, we used the correlation shamus from the dill library to keep track of the face from frame to frame to frame.

This approach also saves computational power since we don't have to descry the face after transforming to a new frame in the real-time video sequence. This helps to include a face- log i.e., concise representation of the face of the subject in a video sequence.

#### III. PERFORMANCE OF THE SYSTEM

FaceRecognition Attendance Monitoring System has been designed to register the face of each individual for the first time.

Formerly done, the network trains it automatically for further operation . For the coming classes, the scholars can get their tone - attendance done with the GUI offering a drop- down menu for the honoured face. This is because of the chance of look likewise within the class. The first name in the drop down has the highest probability of the match.

#### IV. RESULT

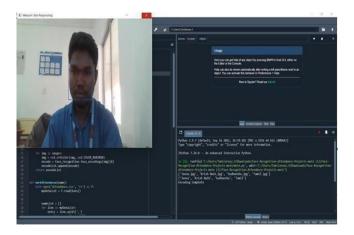


Fig 1.Datasetcapture



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Fig 2. Training images

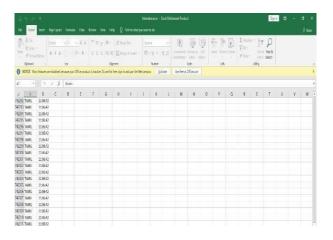


Figure 3. Excel File Attendance

#### V. CONCLUSION

An automatic attendance operation system aims at working the issues of homemade styles of being systems. We've used the conception of face recognition to apply a system that marks the attendance of a particular person by detecting and feting the face. These systems perform satisfactorily with different facial expressions, lighting and disguise of the person. There's room for enhancement since these systems occasionally fail to fete every face pupil present in the classroom. We've made the device movable for easy use indeed when the sessions are on, without disturbing the class. There are unborn reaches to make a further compact ergonomics to make it a more stoner -friendly product to make an impact in erecting a more healthier academic Terrain

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