Missing Person and Criminal Identification using Image Processing

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Abstract: *In the world, a countless number of people are missing every day which includes kids, teens, mentally challenged, old-aged people with Alzheimer's, etc. Most of them remain untraced. To this missing case entry is updated in police station. By using web camera technology compare each person with the available database and find these people. This system designed to find the missing people.[11] If the missing person found in the Web Video streaming then send the location of missing person to police station. After missing person found in the Web Video streaming, send location Email to Police station. So our system can perform the very important role in security and authentication issues. Here the admin perform the all administrative role in this system. Admin can add the user police, remove the user police and view the user police. The system detects the results and generates output accordingly. This will make the work of police to find a particular person easier.[12].*

Keywords: Missing people, finding, face recognition, web camera,Accuracy, Security, Reporting, Integration

I. INTRODUCTION

A missing person can be characterized as the one who can be a child or an adult -- who is lost, voluntarily or involuntarily. There are various categories of missing cases of which only 43% of missing cases' reasons are known, 99% are juvenile runways, 2500 cases are due to family problems and around 500 cases are kidnapped by strangers (which include both teens and adults). Women add about 52% of missing cases and males 48%.[13]"In India, there are no budgets allocated to finding missing people", claimed by an official source.A missing person faces many obstacles, few are subjected to death (murder), rape or abuse. People concerned with the missing person such as parents, friends, relatives and guardians are exposed to stress and worries from not knowing whether the missing person is alive or dead.In our system, the image of the person given by the guardian at the time of missing is stored in the database by the police.Automatic detection of match for this picture among the already existing images in the database will be done through our application..[12] This helps the police department to spot the missing person in any place in India.When a suspicious person is found, the picture at that instance of time is compared with the images uploaded by the police department at the time of missing through the face recognition model. If a match is found, it will be notified to the police in the form of an email message along with the location of where the person is found. If not found, a new record will be created in the database with the uploaded picture. By this way, it decreases the time taken to search for a person's detail after he is found.Sometimes, the person has been missing for a long period of time. The age gap is reflected in the image as ageing affects the structure of the face, including shape, texture, etc. The appearance of the person can vary due to ageing, filters, pose, lightings etc. All these factors were considered before choosing the face recognition algorithm.

II. PURPOSE

The Purpose of the MISSING PERSON & CRIMINAL IDENTIFICATION USING IMAGE PROCESSING is to Saving time and human efforts - The system goal is Saving time and human efforts, Every bus stop, temple, mall, railway stations have the much more people crowd, if we think to find the someone in the crowd it's difficult observe to the human eye, but as we know the all above place have the CCTV coverage, this will help us to find the wanted person

by using the technology which is faster and reliable as compare humans. This will directly help to save time and human effort

III. OBJECTIVE OF SYSTEM

- **User Authentication:** Implement a secure login system for administrators to access the system.
- **Dashboard:** Provide a user-friendly dashboard
- **Real-time Updates:** Ensure that records are updated in real-time
- **Notifications:** Send automatic notifications to the admin and police station
- **Data Security:** Prioritize data security and privacy, ensuring that sensitive information is encrypted and accessible only to authorized users.
- **Mobile Accessibility:** Design a mobile-friendly interface or a dedicated mobile app for on-the-go tracking for missing person
- **Analytics:** Provide analytical tools to identify attendance trends, helping administrators make informed decisions.
- **Compliance:** Ensure that the system complies with relevant data protection and privacy regulations.

IV. PROPOSED SYSTEM

The proposed system makes use of Face Recognition for missing peoples and criminal identification. The architecture of our framework is presented in figure.The Architecture of the proposed Person Identification System. Here, the facial features of any reported missing person who is seen on a web cam will be matched to the database and sent to the police via email. Our algorithm extracts the face encodings of the image and compare with that of the face encodings of the previously existing images in the database. If a match is found, an alert message will be sent to the concerned police officer. The admin will login and can add, delete and view the police. The user police can login to the system. The image is detected and feature extraction is done, if match is found then, notification and email is generated and sent to police, if not then also notification is generated. When the match is found, the location is also sent along with the email.The system uses python, OpenCV library, haar cascade algorithm and frontal face algorithm, MySQL database. It requires the web camera to detect the face of lost person.

SYSTEM ARCHITECTURE
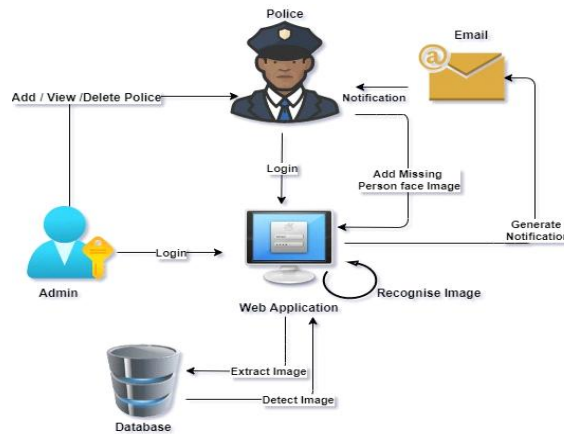
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V. CONCLUSION

- We have developed a criminal identification system. It will save you time and effort, especially if you are going somewhere sociable. The goal of the Automated Criminal Identification Approach is to eliminate the flaws in the traditional (manual) system.
- This system exemplifies how image processing techniques can be used in public spaces. This technology has the potential to not only assist in criminal investigations, but also to improve the government's reputation.

VI. ACKNOWLEDGMENT

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