MISSING PERSON AND CRIMINAL IDENTIFICATION USING IMAGE PROCESSING

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ABSTRACT

Every day, enormous numbers of people go missing from the globe; these include children, teenagers, persons with mental disabilities, elderly people suffering from Alzheimer's, and so on. The majority are yet unidentified. An update has been made to the police station's missing case entry. These persons can be located by employing webcam technology to compare each individual with the database that is accessible. This technique was made to locate those who had gone missing. Send the missing person's location to the police station if they are discovered while watching a web video.Once the missing person has been located via live web video, email the police station with their whereabouts. Thus, our system is capable of carrying out a crucial function in matters pertaining to security and authentication. Every administrative function in this system is carried out by the admin here. The administrator has the ability to view, add, and remove user police. The system recognizes the outcomes and produces output in line with them.

Keyword: - *Missing people, finding, face recognition, web camera.*

1. INTRODUCTION

A person who is lost, whether intentionally or unintentionally, can be classified as missing. This individual can be a child or an adult. There are many different types of missing cases; only 43% of the causes of missing cases are known; 99% of cases include juvenile runaways; 2500 instances involve family issues; and approximately 500 cases involve strangers kidnapping victims (including adults and teens). About 52% of missing instances are in women and 48% are in men. According to an official source, "there are no budgets allocated in India for finding missing people." While many challenges confront a missing individual, very few experience abuse, rape, or death (murder). The uncertainty about the missing person's whereabouts causes tension and anxiety for those who care about them, including parents, friends, relatives, and guardians. The police have a database in our system that has the photo of the missing person that was provided by the guardian. Our application will automatically identify a match for this image from the pre-existing photographs in the database. This makes it easier for the authorities to find the missing person wherever in India. When a suspicious person is discovered, the facial recognition model compares their

photo at that moment with the ones the police department submitted when the person went missing. An email message containing the location of the person located will be sent to the police if a match is discovered.

2. LITERATURE REVIEW

Using edge detection and Gaussian filtering techniques, AniruddhaDey focuses on contour-based face detection and tracking from video. Face tracking, moving face contour detection, and face detection are important methods[1].Andreas Ess et al.: By combining different vision modules for pedestrian identification, depth estimation, and tracking, together with automatic failure detection and recovery, they propose a mobile vision system for reliable multi-person tracking[2].In order to improve tracking performance in low-resolution circumstances, Rolf H. Baxter et al. provide an adaptive motion model for person tracking with instantaneous head-pose features[3]. He Guohui and Wang Wanying: Present an algorithm that combines edge detection and skin color segmentation approaches to drive face detection and localization when tired[4].K. V. Arya and Abhinav Adarsh: Using skin detection, segmentation, face detection, and PCA verification methods, they describe an effective face detection and recognition method for surveillance[5].Pranti Dutta and Dr. Nachamai M.: Concentrating on single-facial detection, they assess how well a face detection system performs on videos saved in various file formats[6]. A sparse hashing tracking framework for object tracking is proposed by Lihe Zhang et al. They use discriminative hashing techniques to get the estimated nearest neighbor[7].

3. PROBLEM STATEMENT

Since it can be challenging to locate a person in a crowd, we are using CCTV cameras to implement the Haar Cascade algorithm. with the aid of facial recognition and image processing. The person will be recognized by the system when his face matches. Once we enter the criminal's face information into our system, this aids in their location.

4. PURPOSE

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

5. SCOPE

In order to identify missing people and possible criminals, image processing techniques are used to detect and recognize faces from a variety of sources. In addition to taking ethical and legal issues into account, it involves tasks including face detection, feature extraction, database integration, pattern recognition, and real-time processing. Missing persons can be located in public spaces such as train stations, bus stops, and tents.

6. MOTIVATION OF THE PROJECT

The goal is to use computer vision and facial recognition technology to speed up the hunt for missing people. This can improve public safety, speed up reunions, and give law enforcement much-needed assistance. In general, the creation of such a system can significantly ease the difficulties posed by cases involving missing persons and enhance societal well-being.

7. OBJECTIVES

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.

8. METHODOLOGIES OF PROBLEM SOLVING AND EFFICIENCY ISSUES

Technology to be including the plan	How it will be used	Material that need to be created
1.Web Application	It is used in Web camera, IP camera	Web camera IP camera
2.Net Application	To detect person	Visual studio Code
3.Mobile Application	To used handle application manual and store data	Android and Mobile
4.Cloud storing	Storing all information in cloud.	Cloud account

9. SYSTEM ARCHITECTURE
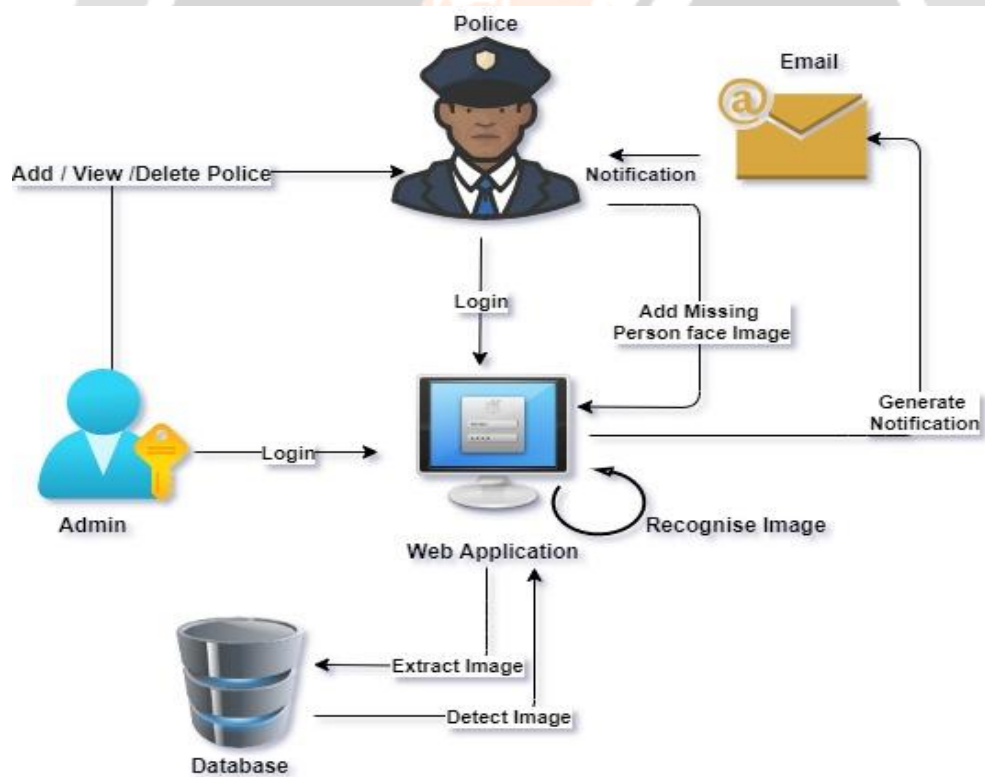
Fig 1: System Architecture

10. CONCLUSION

A method for identifying missing people has been created, tested, and shown to display missing people as well. This product's key characteristics are its low cost, low power consumption, and minimal number of hardware components. The primary use of this method is in the identification of missing children and elderly people. This can be used to identify elderly people, physically challenged youngsters, missing children, and give them to their guardians with the assistance of the police.

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