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Missing Person Identification System

Prof. Kanchan Mahajan[1], Mr. Dheerajkumar Patil[2], Mr. Darshan Pawar[3], Mr. Siddhant Patil[4], Mr. Rahul Shewale[5]
[1, 2, 3, 4, 5]*Department of Computer Engineering, Sandip Institute of Technology And Research Centre, Nashik, India,Savitribai Phule Pune University, Maharashtra.*

Abstract: In the world, countless people are missing every day,including children, adolescents, psychological challenge, elderly people with Alzheimer's, etc. they remain without a trace. These charges are missing and are being reviewed at the police station. Ngu using webcam technology compare the individual and the database available again to find these people. This program is designed to locate missing people. If missing The person is found in the Web video stream and sends the location of the lost person to the police station. After a missing person is foundin a Web Video stream, send location Email to the police station. So our system can play a very key role in matters of security and authenticity. Here the manager does all the management rolesin this program. The controller can add active police officers, remove active police officers and watch police using. The system gets the results and produces the output accordingly.

Index Terms: (Keywords – python, OpenCV library,haar cascade algorithm and frontalface algorithm, MySQL database).

I. INTRODUCTION

A missing person can be identified as a potential child or adult - missing, voluntarily or uninvolved. There are various categories of missing cases of which only 43of child racing methods, 2500 cases are due to family problems and about 500cases are abducted by strangers (including youth and adults). Women add about 52budget has been setup to find missing people," said an formal source. The missing person faces a many issue, including torture (murder), rape or torture. People dealing with a missing person such as parents, friends, relativesand caregivers are exposed to the stress and anxiety of not knowing if the missing person is alive or dead.

In our system, an image of the person given to the caregiver at the time of the loss is kept in the database by the police. Automatically detecting similarities between images that al- ready exists in db will be done through our app. This helps the police department to identify a missing person anywhere inIndia. If a match is found, you will be notified by the police inthe form of an email message and the location of the person. If not available, a new record will be created in the database contains the uploaded image. In this way, it reduces the timeit takes to search for personal information after a discovery. Sometimes, a person has been missing for a long time. The age gap is reflected in the picture as aging affects facial shape, joint shape, texture, etc. A person's appearance can vary with age, filters, shapes, lights etc. All of these things were considered before choosing a face recognition algorithm.

II. LITERATURE SURVEY

The missing person can be identified as a potential child or adult - missing, voluntarily or uninvolved. There are various categories of missing cases known only 43 percent of cases are lost, 99 percent are children's roads, 2500 cases are due to family problems and about 500 cases are abducted by strangers(including teenagers and adults). Women add up to 52 percentof lost cases and men 48 percent.

"In India, there are no allocations for missing people". The missing person faces many challenges, with few being killed (murdered), raped or tortured. People dealing with a missing person such as parents, friends, relatives and caregivers are exposed to the stress and anxiety of not knowing if the missingperson is alive or dead.

In our system, an image of the lost person given to the caregiver at the time of the disappearance is kept in the database by the police. Automatically detecting similarities between images that already in the db will be done through our app. This helps the police department to identify a missing person anywhere in India. If a match is found, you will be notified by the police in the form of an email message andthe location of the person. If not available, a new record will be created in the database containing the uploaded image. In this way, it reduces the time it takes to search for personal information after a discovery. Sometimes, a person has been missing for a long time.

The age gap is reflected in the image as aging affects facial features, including posture, texture, etc. A person's appearancecan vary due to age, filters, shapes, lights etc. face recognitionalgorithm.

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III. WORKING STRUCTURE

In this software where we will find a person with the helpof face recognition software. In this software we can also find missing people, terrorists etc. This software has its own backupinformation for the missing person. As soon as someone is identified by the software they will send a warning messageto the nearest station. This software works in three different steps.

Camera or CCTV face detection to match face face features.To address identity we use the Line edge map algorithm. In these facial recognition we use a visual and visual library that can be easily integrated into the app.



Fig. 1. Working Structure

Provides API's for face detection and tracking. Provided with a Tracker API that allows real-time tracking and facial recognition. The SDK provides links to 66 facial features. It uses multiple processor cores to speed up recognition. The library support Direct-Show compatible webcams and IP cameraswith MJPEG interface.

At the same point the application has two types of users other than end users namely women and girls respectively the police department and Government officials. The big part that separates this safety program from others is that it reducesthe roles of this incident, because here we are looking at the safety situation of women and therefore the worst indicators, would be a criminal case and we could take appropriate actionwithout involving the right people.

Government officials are given the highest rights in thesystem, it will be their responsibility to provide details ofcrime data in the system from the police department and to monitor the situation on a large scale.

IV. ALGORITHM

1) *HAAR CASCADE Algorithm:* HAAR CASCADE is a machine learning algorithm used to identify objects in picturesor video. It is a machine-based learning method where cascade activity is trained from many beautiful and beautiful pictures and videos. Used for finding items in other photos and videos.The algorithm has four stages:

- Haar Feature Selection.
- Creating Integral Images.
- Adaboost Training.
- It is well known for being able to detect faces and body parts in an image, but can be trained to identify almost any object.

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V. BLOCK DIAGRAM

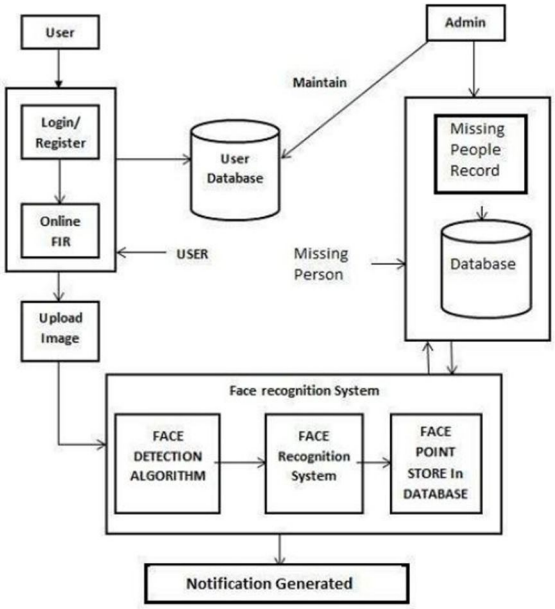


Fig. 2. Block Diagram Description

VI. EXPERIMENTAL SETTING

A. This project is implemented using C hash in .NET framework.
B. We have use Visual Studio which is is an integrated development environment from Microsoft.
C. In addition, our system requires less software and hard- ware compared to existing systems.
D. In testing period we have taken around 100- 200 imagesof type: JPG, PNG, JPEG, BitMap etc and tested our algorithm. The proposed method achieved the highest performance of the tested methods, with an average resolution of 97.01 percent,When the standard image size was set to 30X30, which is average image size,the performance improved by an average resolution of 37.1percent compared with when the standard imagesize was set to 5050, under the same experimental conditions.

VII. RESULTS

In About result table, the face recognition accuracy of our proposed method is compared with three (5) other different existing methods in a controlled environment, respectively. The results in above table, shows that our method comparedto other different methods, proves to be very robust to be implemented in a controlled real-life environment and proved to be efficient in a manner with accuracy around 97.01 percent.

Sr.No	Face Detection Methodologies	Accuracy [Sample Size = 5000]
1	Modified Haar Cascade	97.01%
2	Neural Networks	75.4%
3	Skin Segmentation Template	52.3%
4	Matching Modified Haar-Cascade	65.87%
5	Higher Order Statistics	72%
6	Two Step R-CNN Method	94%

Fig. 3. Result Table

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VIII. BENEFITS

A. Time Saving.
B. Easily find the missing person.
C. Less exposure of crimes.
D. Reduce the missing person rate.

IX. CONCLUSION

In this project, we compare the different types of imagesand the degree of accuracy of the results is very satisfying. Works well on both photos and videos. The results shown are 90 percent accurate. This requires less memory space to use and takes less time compared to other methods. By using this criminals and children/ missing people can easily be identifiedand continue to regenerate with vigor.

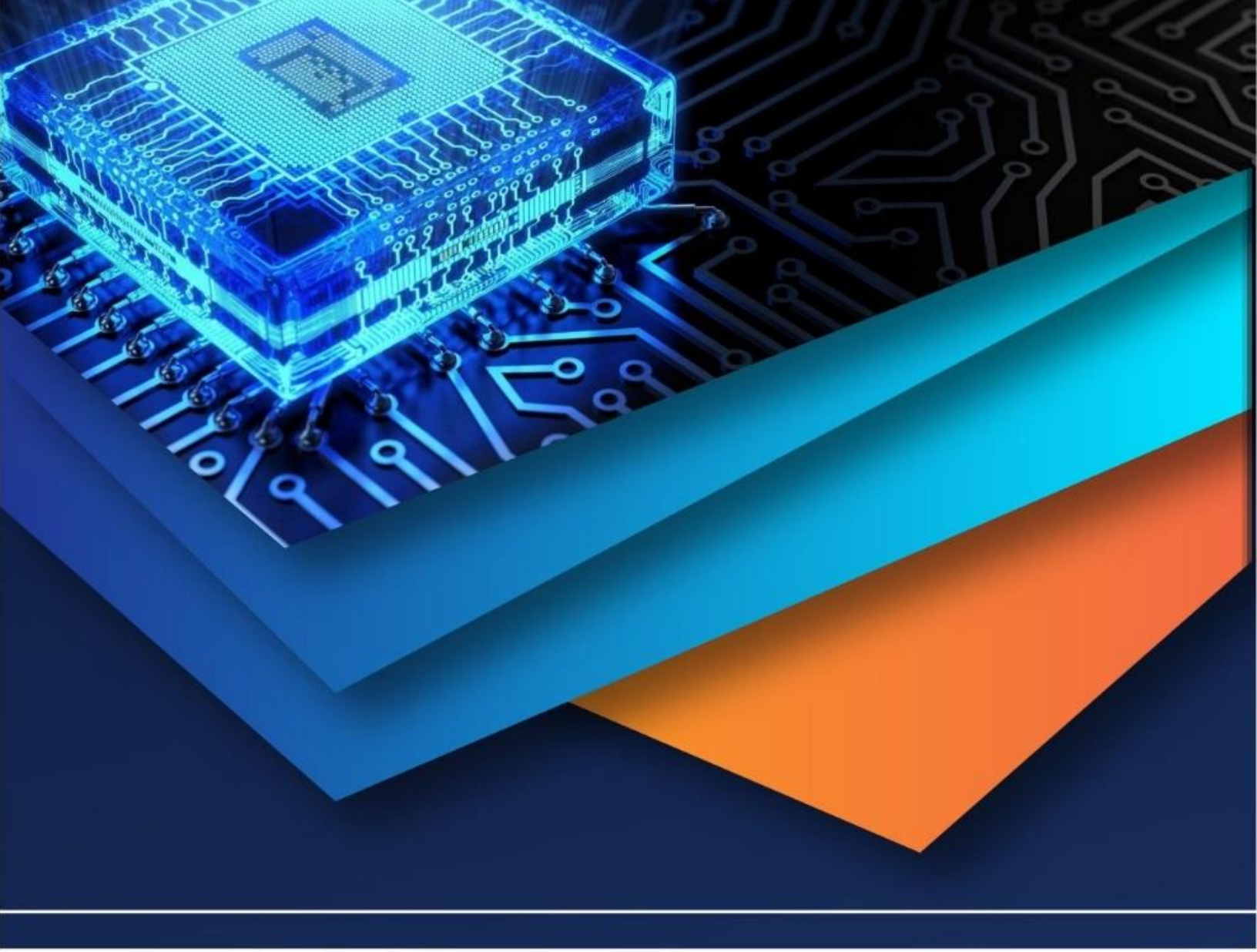
X. FUTURE SCOPE

The purpose of researching the traditional way of finding people is to perform a process that takes time and requires a great deal of human effort. It also requires moving from place to place to get help and disseminate information. Information obtained about a missing person may not always be accurate. Details always require manual verification with the helpof this system based on Finding People's face recognition.We will be able to reduce people's time and locations. The future task we focus on now is to implement and evaluate the performance of our proposed system so that we can prove that our proposed system is better at Finding a Lost Person than any of the previous proposed programs.processis done with real crime images on the web and gives good results. We believe this program will reduce crime in our area.

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