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ATM Theft Detection using Image Processing

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ABSTRACT: The real-time face detection and recognition has been made possible by using the method of Viola jones, Analysis work. The software first taking images of all persons and stores the information into database. Proposed work deals with automated system to detect person. The methodology comprised of three phases, first face Detection from image, second get all detail of face for the purpose of feature extraction. The most useful and unique features of the camera image are extracted in the feature extraction phase. Find out all facial details are visible. This feature vector forms an efficient representation of the face. In third phase and grab our feature extraction has been created to find the person how osculated face.

KEYWORDS: We would like to encourage you to list your keywords in this section

I. INTRODUCTION

The rise of technology bring into force loads of types of tools that aspire at more customer pleasure. ATM is a machine which made money transactions effortless for customers. But it has both advantages and disadvantages. Current ATMs make use of naught more than an access card and PIN for uniqueness confirmation. This has ATM Using Face Recognition System demonstrate the way to a lot of fake attempt and mistreatment through card theft, PIN theft, stealing and hacking of customers account details and other part of security. Checking the Camera module based face are recognized with comparable performance are based on the similarity between features extracted from regions of the images and those from the query image. Face recognition system is an application that mechanically identifies a person from a digital image source. One of the behaviors to do this method is by matching chosen facial features from a facial database and the image.

II. SOFTWARE DISCRIPTION

We are using Anaconda for the implementation purpose. Anaconda is distribution of the python and R. Spyder for editor and complilation.*We are using DB Browser SQLite for database. DB Browser for SQLite* (DB4S) ihigh quality, visual, open source tool to create, design, and edit database files compatible with SQLite.

III. SYSTEM OPERATION

3.1 Step by Step Process
Let S be the Whole system which consists:
S= IP, Pro, OP.
Where,
IP is the input of the system.
Pro is the procedure applied to the system to process the given input.
OP is the output of the system. A.
Input:
IP = I. Where, I is set of images, provided as an input. B.
Procedure:
Step1:Camera captures the user.
Step 2: verify the information into database.
Step 3: first taking Camera of all the authorized persons and stores the information into database. Step 4: Proposed work deals with automated system to detect and classify the face using edge detection.

Step 5: The methodology comprised of three phases, first take image and convert it into frames.
Step 6: Next apply blob analysis for the purpose of face Detection from camera.
Step 7: Third apply edge detection for the purpose of classification. College Short Form Name,
Step8: As per comparison show Result.
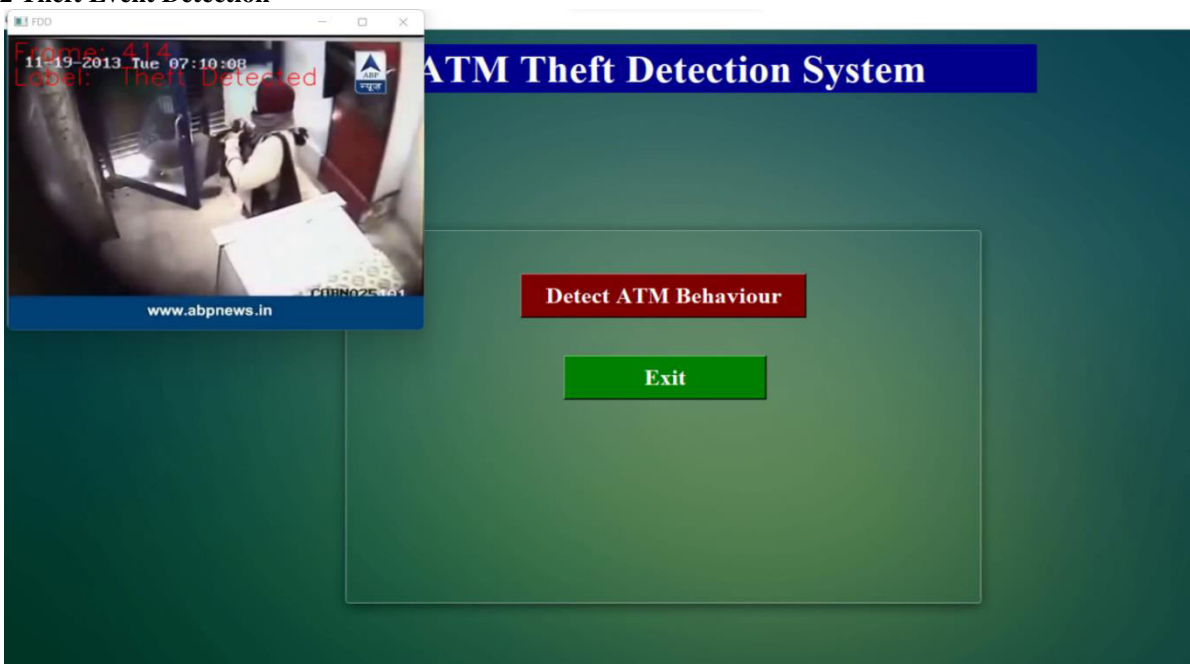C. Output: person's face is detected
.

IV. RESULT AND CONCLUSION

4.1 Normal Event detection

In this we have use video for the theft detection purpose. In this we have seen that the lady is withdrawing her cash in ATM so this is an normal event we have seen using this software.

4.2 Theft Event Detection

In this the second person is trying to get in theATM which is not allowed in ATM room so we can say that theft is happening in ATM room so this software has given us theft detected in red colour

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