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# **BANK CCTV MOTION DETECTION**

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Abstract: The rising rate of BANK robbery cases now a days in INDIA has drawn our attention. Despite having the CCTV surveillance system, the BANK robbery has been occurring in an alarming rate recently. One of the reason is the CCTV recorded video in BANK is limited to use as proof after crime occurrence while the video for serving as a real time alarm for the security. BANK CCTV MOTION DETECTION work to improve surveillance services in which areas where motion detections and human identification are required. Real time analysis of human motion from CCTV data can be used to notify the security guard about a suspicious individual committing burglary and thus gives chance to immediately cease the criminal red-handed. In the process of human motion analysis, at first human must be detected in an image following three stages namely

i)environment/background modeling,

ii) motion segmentation and

iii) object classification. In this

## Index Terms - BCMD, Security system, Motion detection.

# I. INTRODUCTION

Real time analysis of human motion from CCTV image data can be used for early detection of suspicious person to alert the security guard, usually occupied with so many monitors in the control room, for redrawing their attention to stop the ongoing BANK robbery. Human Motion analysis has been utilized in several surveillance projects such as Motion Detector (Amethyst, Virtual Guard, image Surveillance and Monitoring, and Human Motion Detection Framework. Detection of human in an image is the first and vital step in the process of human motion analysis. Different human motion detection methods have been surveyed in as part of the human motion analysis process framework in addition to where surveillance issue was focused. The process of human detection in surveillance video usually involves environment, motion and object modeling's classification. These are stages overlay with each other during process.

## **II. EXISTING SYSTEM**

A research paper "Video Surveillance Storage: How Much Is sufficient?" by Seagate shows compressiontechniques to store the CCTV data which results in loss of quality and does not affect much on size of video. So, they suggested to use Backup plus option. And other research done in Primary includes the storage device connected to camera where the data is compressed and stored in secondary where secondary is used for backup which is server or cloud. Then the primary is clean and index to secondary storage. In this technique, data is safe as the CCTV cameras are used for security reasons. In recent researches they suggested to store the CCTV footage in cloud. But in this case we need fast internet connection for storing footage. So, it is unrealistic. in India in coming years

## **III. PROPOSED SYSTEM**

ATM robberies have been matter of serious concern in most of the countries of the world for many years. Now it has become a worrying issue in Malaysia because of the frequently occurred BANK robberies in the last few years. There 7345 and 8421 BANK robbery cases were filed in whole Europe in 2013 and 2014 respectively .Also, 8322 cases were recorded in India in 2012. Fig. 1 shows data records of ATM robberies in Malaysia in last five years . It is worth to mention that, there is at least one ATM robbery per 3.5 million transactions in USA and Australia every year. Despite knowing the fact, ATMs are

under the CCTV surveillance, thief are not scared of committing criminal sin. One of the reason could be the capture video of ordinary CCTV is currently used as evidence not as an "active real time media" to alert the security guard about the ongoing steal. Using the CCTV video for a real time alarm system has not been considered yet to improve the BANK security. Step is analyses the customer and order details, the third step is random selection of customer and orders then according to that order is placed. The main work is handled by staff and admin of the business



# Working:

- Step 1: First we register employee/customer if he/she.
- Step 2: Now, authorized user can view all total customers and employee and unknown.
- Step 3: authorized user can view In-Out record of customers and employee and unknown..
- Step 4: If there is no motion it will not capture and will able to avoid wastage of memory.
- Step 5: By using face recognition feature we mark attendance
- Step 6: Finally, we display the result as record of entry count of customer employee unknown and time details.



Flow Chart

#### **IV. LITERATURE SURVEY**

- 1. Real Time Security System Using Human Motion Detection Author ahire upasana1, bagu1 manisha, gawa1i mohin november 2015 object tracking is an important component of many vision systems. it is used not only for visua1 surveilance, but aso for augmented identify important events in a scene
- **2.** a survey on moving object detection and tracking techniques Author A Survey on Moving Object Detection and Tracking Techniques May 2016 Mainly analysis is categorized into three basic phases: moving object detecting, finding the direction of object from one frame to another frame and scrutiny of entity tracks to identify their performance
- **3.** A Survey of Deep Learning-based Object Detection Author Licheng Jiao, Fellow, IEEE, July 2019 Most approaches for moving object detection (MOD) based on computer vision are limited to stationary camera environments.

#### V. RESULT



Fig 5.2 : registration

Fig 5.3: employee Details



Fig 5.5: Unknown Details

E→ Attendance			
Employee	Customer	Unknown	
Fig 5	5.6: Delete red	cord	
- 6 -			A
E•	Attendance		
Employee	Customer	Unknown	
Akshay-Tejam Do you	uwant to delete	ų	CRI
Emplo	yee Akshay-Teja	m?	
	Yes		
		۵	

5.7:In-Out Records



#### **VI.** CONCLUSION

The aim of Bank cctv motion detection system is to avoid ROBBERY and keep track on every person entering in the BANK. This system is used in case to improve safety and security. This technology can also help to advance the system wireless access to CCTV video. wireless access to CCTV video .This system allows BANKS to track the people entering and exiting the bank. As a consequence of the increases in life expectancy the healthcare needs faced by the recording the actions. As such new application using emerging technologies are needed to contribute for the safety and well-being. We can easily manage and track all the people entering in the BANK using these system. The full automated face detection and recognition system was not robust enough to achieve a high recognition accuracy. The only reason for this was the face recognition subsystem did not display even minor degree of invariance to scale, rotation or shift errors of the segmented face image The automated vision systems implemented in this thesis not even approach the performance, not they as robust as a human's innate face recognition system. However.

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