VIDEO SURVEILLANCE SYSTEM

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Abstract:

This is an innovative approach to video surveillance system project. Normally the people find video camera’s in banks and other organization that continuously record and save the recorded video footage for days or months. This utilizes a lot of battery life and storage capacity to store this large video footage. Well this video surveillance system is an enhanced version of organization security that continuously monitors but only records unusual changes in the organization. These unusual changes may include theft detection or fire detection in offices. It may also include rodent detection in bakeries or restaurants after closing. As soon as the system catches any unusual activity it takes steps and informs the user by:

- Sending a sms to the user about an unusual activity.
- Sending an image of the activity to the users Email so that he may check the problem seriousness and react accordingly.

Keywords — video surveillance, System Catches , Unusual Changes, Instantly Alerts, Suspicious Activity.

I. INTRODUCTION

ATMs are placed not only near or inside the premises of banks, but also in locations such as shopping centers/malls, airports, grocery stores, petrol/gas stations, restaurants, or anywhere frequented by large numbers of people. There are two types of ATM installations: on- and off-premises. On-premises ATMs are typically more advanced, multi-function machines that complement a bank branch’s capabilities, and are thus more expensive. Off-premises machines are deployed by financial institutions and Independent Sales Organizations (ISOs) where there is a simple need for cash, so they are generally cheaper single function devices. In Canada, ATMs (also known there as ABMs) not operated by a financial institution are known as white-label ABMs. A video surveillance system which includes at least one field recording site and at least one remote viewing site linked by a communication channel of the internet.

II. EXISTING SYSTEM

In the existing system, the surveillance cameras are used many other places. It is used to monitor the user activities. But it continuously monitors the activity of the user and where the cameras are fixed. So it utilizes the power and large storage capacity (Hard disk) for store the video footage. It is only store the activities for detect the unwanted activity such that theft, but it is not intimate immediately to the admin or organization. So it is not effective.

DISADVANTAGES
It is continuously storing the activities, so it requires the large storage for video footage.

- It requires the more power consumption.
- It only store activity, does not intimate to the admin.

III. PROPOSED SYSTEM

In the proposed system, to implement the system to overcome this problem. It is used to only monitor the user activity and store when the irrelevant activity is performed the user. So it reduces the storage device. In this system first set the time for each activity in the ATM. When the user enters and the camera detects the user, then it starts the time of the particular event. The user finish the activity within the time the camera only monitors the user. It start recording only when the user take the over time compare to set time. It training the all irrelevant actions to the system. The recorded video is compare to the training actions, it intimates the alarm or message to the admin when match the record video actions and training actions.

ADVANTAGES

- It is used to reduce the storage space
- It is used to intimate the alert message to the admin, when the irrelevant action performed in the ATM.

IV. MODULE

- ATM simulator
- Video Acquisition
- Set Session time & Irrelevant Templates
- Verification & Alert Module

MODULES DESCRIPTION

ATM SIMULATOR

In this module is used to create new ATM simulator for analyze the theft activity in ATM centers. is used to the admin login to the system for view the user action video from the camera.

VIDEO ACQUISITION

The video capture process involves several processing steps. First the analog signal is digitized by an analog-to-digital converter to produce a raw, digital data stream. In the case of composite video, the luminance and chrominance are separated; this is not necessary for S-Video sources. Next, the chrominance is demodulated to produce color difference video data. At this point, the data may be modified so as to adjust brightness, contrast, saturation and hue. Finally, the data is transformed by a color space converter to generate data in conformance with any of several color space standards, such as RGB. It is used to input the video to the simulator, then it splits the videos into no. of frames for detect the irrelevant actions. The frames are converting the RGB color to grayscale conversion for noise removal.
SET SESSION TIME & IRRELEVANT TEMPLATES

It is used to the admin set the session time for each activity used in ATM such that (Width drawl, balance enquiry, etc) for the security purpose. The session time is used to indicate the camera to store the user perform activity in ATM. Then the admin training the irrelevant activity for detect the user irrelevant actions performed in ATM.

VERIFICATION & ALERT MODULE

In the verification Module is used to check the user actions and it detect the irrelevant actions are performed in the inside of the ATM. When the user perform the action in after exist the session time the camera automatically store the user actions. And it compares the user actions and stored action templates if it is match to send the alert message immediately to the admin.

V. ARCHITECTURE DIAGRAM
User

ATM

Detect the User

Check the time

With in Time

Only monitor

Session Timeout

Store the Actions

Compare Actions

Send alert message

Admin

Set time for each activity

Training Pattern

Data Base
VI. CONCLUSION

A major problem in mobile search is that the interactions between the users and search engines are limited by the small form factors of the search engines. As a result, web users tend to submit shorter, hence, more ambiguous queries compared to their web search counterparts. We proposed PWS to extract and learn a user’s history and content preferences based on the user’s profiles. To adapt to the user mobility, we incorporated the user’s details in the personalization process. We observed that profile help to improve retrieval effectiveness, especially for search queries. We also proposed privacy parameters, DP and IL, to address privacy issues in PWS by allowing users to control the amount of personal information exposed to the web server. The privacy parameters facilitate smooth control of privacy exposure while maintaining good ranking quality.

BOOK REFERENCE

Following books and eBooks are used to complete this project reports.

BIOGRAPHICAL NOTES

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