Abstract

Traditional video surveillance takes a huge amount of storage space. Recording everything
captured by a surveillance camera consumes the large storage space and hence limits the duration of video that can be stored. In addition, recording everything makes it time consuming for a human to review the stored video. Mounting video cameras is cheap, but finding available human resources to monitor the output is expensive. All these disadvantages limit the effectiveness of traditional video surveillance. To solve these problems, recording only crucial images that contains important information is the only way. Identifying moving objects from a video sequence is a fundamental and critical task in many computer vision applications. We will be using SOBEL filter which comes under edge detection algorithms, and creates an image which emphasizes edges and transitions. Nowadays, the size of storage media increases day by day. Although the largest capacity of hard disk is about 2 Terabytes, it is not enough large if we store the video file without compressing it. Image Compression aims to describe the process of storing the image with less number of bytes in digital memory by removing the redundancy from the image. Digital Images are stored with BMP, TIFF, GIF, JPEG formats. So to overcome these disadvantages we are proposing an effective object detection and video surveillance system. Video surveillance has found its importance for security purpose in every industry throughout the past several years, especially where the safety is of utmost importance.

References

An Effective Object Detection Video Surveillance and Alert System


- Robert Bodor, Bennett Jackson, Nikolaos Papanikolopoulos, "Vision-Based Human Tracking and Activity Recognition," 2014

**Index Terms**

Computer Science  
Security

**Keywords**

Object Detection  
Real Time Video Surveillance  
Edge Detection  
Alert Message  
Sobel Filter  
Motion Detection.

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