Abstract

Traditional video surveillance takes a huge amount of storage space. Recording everything
An Effective Object Detection Video Surveillance and Alert System

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. [6] 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

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Index Terms

Computer Science

Security

Keywords

Object Detection Real Time Video Surveillance Edge Detection Alert Message System Sobel Filter

Motion Detection.