

IDENTIFYING CUSTOMER INTEREST FROM SURVEILLANCE CAMERA AND SECURITY ALERT BASED ON DEEPLARNING

In this project mainly focus the security of the shop.If an incident occur at night in a shop,people came in from outside,in case product may fall and if any changes occur ,It is advisable to notify the appropriate security or higher authority.

In the existing System based on emotions , the customer who comes to the shop find out whether they are satisfied or not.it uses the FER dataset and CNN algorithm .There were 2 modules in it staff and admin.Now add the new module Security.To this must be added abnormality detection .This is to be found in Background Subtraction Algorithm.

Background Subtraction Algorithm

Background Subtraction ,also known as foreground detection,is a technique in the fields of image processing and computer vision wherein an image's foreground is extracted for further processing in its foreground.After the stage of image processing object localisation is required which may make use of this technique.

Background Subtraction is a widely used approach for detecting moving objects in videos from static cameras.The rationale in the approach is that of detecting the moving objects from the difference between the current frame and a reference frame ,often called "background image,or"background model".Background subtraction is mostly done if the image in question is a part of a video stream.Background subtraction provides important cues for numerous applications in computer vision,for example surveillance tracking or human poses estimation.

The Initial frame will be captured when the camera switched from Emotion Recognition to Abnormality detection While it is running.Keep it as a base and keep checking each and every next frame.If there are any further changes in a thresholding after checking,background subtract will detect the changes between them.if the threshold change is greater than the threshold different distance ,the corresponding adopt will be notified .

And the extra section is to the camera is recording 24 hour a day .Those images and videos are recorded by memory loss.no need to save it.so if that change is identified ,only the frames from the time the change is identified will be saved and merged and the video itself will be written to memory.

Abnormality can be notified immediately when something happens and memory storage can be saved as corresponding.