Integration of Object Detection Approaches in a Surveillance System

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ABSTRACT

Although the video monitoring is a very safe monitoring assistant, but because of the object which monitoring different, or monitoring scene change, and creates the foreground object detection efficiency or the rate of accuracy reduces. Generally speaking, monitoring assistant ’ s most important pre-processing is to separates the prospects object with the background which has been in existence. For a good system or algorithm, is not only applicable to a particular type of monitoring environment, but through some sort of flexible mechanisms under the current scenario by monitoring the state of the environment.

This paper ’ s main proposed is use of vector space module (VSM), to converted a row vector images, and use of cosine to determine the current management set the screen input vector and reference frame similarity to determine the state of the environment monitoring. If two-dimensional images of the vector are the same as the ratio of degree, that is mutual to the volume level implementation, the angle θ is 0, the cosine of its line to the volume number is 1, representing the two images have a high degree of similarity can be inferred for the static camera to monitor the environment. In contrast, when the two-dimensional vector of degree is not the same example, will reduce the number of cosine low-grade, on behalf of the two images and not similar to those inferred for the cameras to monitor the dynamic environment. And monitoring for different scenes prospects choose the most applicable foreground object detection method to detect objects

Keywords : foreground object detection、background subtraction、temporal difference、optical flow、VSM

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