

## عنوان مقاله:

A Framework for Segmenting Moving Objects in Image Sequences Using Vector Quantization to Estimate the Background

## محل انتشار:

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## خلاصه مقاله:

Moving object segmentation is important in many computer vision applications. The goal of moving object segmentation is to classify pixels as foreground or background; the foreground pixels forming the moving objects. A good segmentation method should be able to do segmentation when the scene is complex as well as adaptable to changes in the environment. Many methods have been proposed for segmentation; statistical methods are the most popular ones. These methods model the background based on statistical information extracted from incoming frames. In this study, we estimate the background using vector quantization theory. The motion mask is created by subtracting incoming frames from estimated background under various conditions. The performance was measured by some metrics such as similarity and error-rate. The results have shown better accuracy of our proposed method especially when the color variation between background and foreground objects is high; and preserving the high quality background image during the segmentation process without consuming more memory which makes it suitable for .real-time applications

## کلمات کلیدی:

Moving Object Segmentation, Background Subtraction, Vector Quantization, Motion Detection, Video Surveillance

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/443418>

