Abstract

Target detection is an approach to extract object from image, however it is difficult task when object is moving. Moving target detection is a key area in image processing such as traffic control system, activity monitoring security system, CCTV footage etc. For detecting a moving object in dynamic background, a background subtraction based method has already been suggested. These methods does not give better results when object is moving very fast, object is very tiny and presence of lighting effect. To overcome these problems, we propose a new method for Moving Target Detection in Dynamic Background. It achieves dynamic scene using certain probability of time and subsequent frame difference method and addresses the difficult scenario, where object is moving very fast and background changes frequently. In order to increase the accuracy of a proposed method, rate of change in background is calculated in fixed time of interval which will maintain dynamic behavior of object as well as background. The experimental results show that the proposed method can detect moving object more efficiently and completely in both cases online as well as offline video.


A Highly Adaptive Method for Moving Target Detection in Dynamic Background with a Simplified Manner


Index Terms

Computer Science

Information Sciences

Keywords

Background subtraction  Frame difference  Moving target detection  Dynamic background.