MOVING OBJECT RECOGNITION USING BACKGROUND SUBTRACTION

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DECLARATION

It is hereby declared that all the materials in this thesis are the result of my own work and all the materials, which are not result of my own work, have been clearly acknowledged in this thesis.

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ABSTRACT

The approach and solution of recognizing a moving object is very important in many application contexts such as video surveillance both in indoor and outdoor environments, security monitoring, sport matches and others. In this paper, a moving object is identifying from a video sequence. A background subtraction approach used to perform object recognition is proposed. Background subtraction is a technique used for segmenting out objects of interest in a scene by comparing each new frame to a model of the scene background. It involves comparing an observed image with an estimate of the image if it contained no objects of interest. This paper also applied the erosion as a morphological operator to remove noise. After that, Kalman filter is used to keep track of each object incorporating a unique bounding box.