

A NEW METHOD OF DESIGN BASED DETECTION OF MULTIPLE MOTION OBJECTS

E. MOHAN, C. PUTTAMADAPPA AND R. MADHUSUDHANAN

Abstract

This paper introduces an intelligent system, which can be applied in the monitoring of vehicle speed using a single camera. The ability of motion tracking is extremely useful in many automation problems and the solution to this problem will open up many future applications. One of the most common problems in our daily life is the speed detection of vehicles on a highway. In this paper, a novel technique is developed to track multiple moving objects with their speeds being estimated using a sequence of video frames. Field test has been conducted to capture real-life data and the processed results were presented. Multiple object problems and noisy in data are also considered. Implementing this system in real-time is straightforward. The proposal can accurately evaluate the position and the orientation of moving objects in real-time. The transformations and calibration between the 2D image and the actual road are also considered.

Keywords: Motion Estimation, Image Analyses, Speed Detection