

Abstract

Lucas Kanade Optical Flow is a method to detect motion. In this study, Lucas Kanade Optical Flow method was tested for detecting the movement of vehicles in traffic video to classify the traffic jams on the category low, medium and high.

Traffic Classification carried by the average speed of passing vehicles in the video. To help detect the rapid movement of vehicles, a pyramid image representation of the Lucas Kanade method was used.

Based on the results of the study, Lucas Kanade Optical Flow coupled with Image Pyramids work quite well to detect vehicle movement. Even at night vehicle movements can be detected, although not as good in the daytime.

Keywords: Optical Flow, Lucas Kanade, Image Pyramids, Movement Detection, Traffic Classification.