

ABSTRACT

The growth rate of motor vehicles is increasing height, this is causing chaos on the highway. Some stakeholders have made a rule in some regions so that the number of motorcycles that the higher can be orderly and not in contact with the car. One of them is the application of RHK (special stopping space) motorcycle that only allow motorcycles to stop in the room when the red light. RHK aims to streamline the intersection, by placing the two-wheeled vehicle at the front of the street it will inhibit the rate of vehicle deceleration. So hopefully with this RHK can solve the problems mentioned above. However, despite being enacted rules and given a very clear sign that there are still locations RHK motorists who do not obey the rules to stop at RHK.

In this final project has been made an offense at RHK detection applications based image processing by using Android. Android was chosen because it id a smartphone operating system that is widely used by many people. In addition Android is open source too, meaning that the user released the make, execute or modify the program. This system detects violations in RHK by using images as a source of information. Some of the images in a given time will be sent to Android and used the data to be processed. So that the results will be known whether processed at RHK traffic violation or not.

The results of the detection accuracy gained 3.98% car for data set 1 (10 positive and 20 image image negative), 45 615% of the data set 2 (50 positive images and 100 images negative), 79.79% for the data set of 3 (100 positive images and 200 images negatif) and 88.75% for the data set of 3 (150 positive images and 300 images negative). The result of the violation detection accuracy with intervals of 5 seconds is 79,09%, for intervals of 10 seconds at 86,36% and for intervals of 15 seconds at 81,81%

keywords: RHK, Android, detection, violation, digital image