

ABSTRACT

In recent years, the traffic control system has expanded widely and continues to be developed as it can provide broad information. By developing and learning more deeply about the topic of intelligent traffic density will be achieved the main goal in to reduce traffic density, increase mobility and can increase the efficiency of time in driving. In the detection system, several models are proposed in this final project. First, the implementation of Pin Hole Algorithm is done by detecting the object of the car vehicle that passes on the road that often there is congestion. The detection is done by using a monitor camera mounted at some predetermined point by observing the height of the camera, the intensity of the light, the visibility of the camera where after input the number of vehicles obtained will be processed using the Pin Hole Algorithm to obtain the classification of traffic congestion status. The traffic congestion status will be sent to the server address already provided.

In the congestion detection test results were obtained with an accuracy value of 85% using the 64x64 grid division and obtaining good detection results for susceptible light intensity values between 5430 and 41379 LUX with an accuracy value of between 60% and 90%.

Keywords: *intelligent traffic density, Pin Hole Algorithm, congestion, detection, traffic, camera.*