ABSTRACT

The growth in the number of vehicles in Indonesia is very rapid and this causes many problems, including the high growth in vehicle volume which can cause congestion on the highway. Therefore, it is necessary to have the number and classification of types of vehicles that pass through the highway to facilitate monitoring of traffic flow. With a computer vision approach, you can identify and distinguish objects of the type of vehicle that are on the road.

In this final project, the classification of vehicle type detection and number of vehicles is carried out by collecting several CCTV video recordings of traffic from ATCS in Bandung and Semarang with the *.mp4 extension file which is then processed using the You Only Look Once (YOLO) object detection method with darknet architecture. The results of the system test obtained an average accuracy of 72% and for the test results based on the type of vehicle obtained an average accuracy of 22% to 88%.

Keywords : Computer Vision, You Only Look Once, Object Detection, Darknet.