IMPLEMENTATION OF OBJECT COUNTING USING BACKGROUND SUBSTRACTION METHOD WITH OPENCV LIBRARY

Muhammad Dirga Fikry

Departement of Statistics, Faculty of Mathematics and Natural Sciences

Islamic University of Indonesia

ABSTRACT

Transportation plays an important role in development, for that the transportation problem is one of the problems that requires attention. As the population grew, the number of vehicles also increased. The increasing number of vehicles is not balanced with the availability of road facilities, this is the main cause of traffic density which is now getting worse. The prolonged density of vehicles can cause congestion, causing losses to the state on a large scale, starting from time losses, fuel losses and delays in the needs of the area transported by vehicles from cities to villages and vice versa. Traffic density data is an indispensable component for planning a traffic condition. To determine the average traffic density a survey is needed to calculate the number of vehicles passing on the highway. Then the researcher will use the background substraction method in the vehicle count program. Researchers will simulate a calculation program by utilizing video recordings from those installed on the highway. The video was downloaded by researchers from one of the popular streaming media sites, Youtube. From the results of the study, the Program uses the Background Substraction method of the calculation of the object of the vehicle carried by the system producing an accuracy rate of 69.73%. The resulting accuracy is quite low, this is due to the dense road conditions causing the calculation of the program to be wrong, besides there are birds that pass so the program declares it as a moving car.

Keywords: *Density, Traffic, OpenCV, Car Vehicles, Object Calculation.*