

### **Abstract**

**Digital cameras are widely used in various fields with digital era development which is very fast making digital cameras not only for taking an image but also for storing a video at an event, in its application usually Traffic operators retrieve data on the number of vehicles passing along with the segmentation of the type of vehicle manually. In this study a system will be built to detect the number of vehicles and vehicle segmentation automatically using the blob detection method where the segmentation of the vehicle is divided into 3 types of small cars, medium cars, large cars based on the area detected, testing is done by changing the minimum blob area is the minimum area detected as blob. The system built using the matlab for the Image Processing module, the data taken is the situation of the Purbaleunyi toll road. The results of the blob detection showed the best results at a minimum of 6000 blob area with an accuracy of 83.87% in vehicle calculations and 72.09% in vehicle type segmentation.**

**Keyword : Blob Detection, minimum blob area**