

## **Abstract**

Currently in Indonesia, system surveillance traffic still using capability of human supervision. Example in payment parking ticket and ticket in toll gates etc. Surely human can easily distinguish object one to another object but nonetheless human has its limitation as fatigue and lack of concentration. To simplify that matter be required a system that can grouping vehicles automatically. In this final assignment 4 wheel transportation or more will be divide into 3 groups such as, Bus, Car and Truck.

Method feature extraction will be using *Gabor Filter* which use frequency and orientation as parameter to generate important characteristic from image and the result of the process will be value input for classification *Naïve Bayes*. Classification be obtained from various stage of *preprocessing* until become result of category vehicle. After that do a lookup for *Gabor Filter* parameter value in order to give better result with maximum value. Thus experiment shows an acceptable accuracy for about 81.73%.

*Keyword : Gabor Filter, Naïve Bayes, classification vehicle.*