

ABSTRACT

Road traffic sign contains important information about road condition. Road traffic sign is used to make driver more comfortable and more safe. But, in fact there are so many drivers who haven't known the road well so they don't know that there are road traffic all over the road . Besides that, as a human being we often feel tired or even sleepy while driving. This final project talk about the system of detection and classification of the road traffic sign in order to try to overcome many problems that we often face according to our limitation.

Each road traffic sign has their own meaning. The differences between them can be shown easily by using our eyes because each of them has different color and shape. This final project use the unique character of road traffic sign to detect them. This final project use offline system in research. There are some steps to detect and classify road traffic sign in this system. The first step is preprocessing in order to get image with better quality so that can be processed easily in the next step. Next, getting the feature extraction using Gabor method. Last, classify the road traffic sign using k-Nearest Neighbor. In this final project, we assumed that all the object is just road traffic sign.

This final project create a system that can classified road traffic sign that has good enough performance. The accuracy of the system is 94.44% and computation time can reach 8,013103 second.

Keyword : Road traffic sign, k-Nearest Neighbor