

Abstract

Utilization of CCTV to monitor the highway condition has been used by Jasamarga. CCTV will produce a video or moving images that can provide information about road conditions, so Jasamarga able to observe the condition of the highway directly and be able to know the vehicles type that traverse a particular path. The problem that occurs is to determine the number of vehicles that traverse a particular path by vehicles type. The necessary observations to recognize certain vehicles types, so it requires a system that is able to automatically recognize the vehicle type from video.

In this final project built a system that is able to classify the type of vehicle that is recorded by a camera on the highway. The data obtained from the recording will be processed to classify the vehicles types by using Haar wavelet transformation method and Probabilistic Neural Network (PNN) .

With the implementation of these methods, the system can recognize the vehicles type that are grouped into two vehicle types. They're the class of small vehicles and large vehicle class. From the results of testing the system obtained the highest accuracy of 86.71 %

Keywords: *CCTV, video, vehicle, highway, wavelet transform, Probabilistic Neural Network*