

CHAPTER I

Introduction

1.1 Background

Along with the rapid development of technology, the role of science and computer technology in helping to provide solutions to problems in everyday life also greater. One of the science and technology growing today is the vision computer, where it can simply be means that the computer is used as a visual data processing equipment to obtain meaning (semantic value) digital image. This information is can then be delivered in a variety of media, good sound or view warning / information, and intermediaries, both network computer and communications networks, for decision makers.

In this project the concept and computer vision methods explored and applied for detect number digital image of the vehicle on the highway through video. With this application you can detect the number digital image of the vehicle on the highway through video is expected to aid research in traffic counter so it is more easy without having to do it manually.

1.2 Scope

This project will be created using the Java Programming Language and data structure used is an array 2D/matrix. The calculations were carried out to detect the number of vehicles passing on the highway would be included in the txt file, so from txt file will know the number of vehicles that have been detected.

The project is to use multiple processes to detect the number of vehicles passing on the highway, such as capture video frames to get the images from the video, grayscale, threshold, and determination of the detection area using the method contained in the java mouse listener.

1.3 Objective

The purpose of this Project are :

1. Implements a data structure array 2D/matrix in the storage and use of data that is used for making this application.
2. To facilitate in the further research on traffic counters so that applications can be more useful to know / detect the number of vehicles passing on the highway within a specific time via video.