

ABSTRACT

Current technology advances are growing very rapidly rather than reverse with the human senses, especially parts of vision that have limitations in calculating the number of humans at certain events. This processing based on image processing is present and is used to calculate the number of visitors when a store held a grand opening or during a sale. This Processing based on image processing is used to detect objects (humans) that are used to count the number of people for a particular situation.

This final project is used to detect objects (humans) using the Head and Haar Like Feature Detection, this method processes the box territory images and also aims to mark and recognize the shape of the object, especially the part body of the head. This process use the RGB to Greyscale method to detect objects. The design of this system is done by placed the webcam in the corner of the room, then connected with the Matlab software and the calculation of the number of objects (humans) is displayed on the Matlab application interface.

In this Final Project, the test results obtained the best accuracy value on the webcam camera at a 90⁰ angle at a distance of 1.5 meters with a percentage of 80% where the object's state of silence with a capture time of 10 seconds for 10 times the test.

Keywords: *Image Processing, Head and Haar Like Feature Detection, RGB to greyscale.*