ABSTRACT

System for the calculation of the number of man is done manually. This manual calculation by calculating his regular one by one the number of people in the calculation process.

This thesis examines one of the applications of human detection system using Android OS Smarthphone to count the number of objects present in an image. This thesis focused on the number of people considered the number of detected human face on the object. Put on a simulated human image taken using the camera on a smartphone. Processed part is part of the human face is detected based on the ratio of the size of the face shape (Shape Ratio) is by taking the facial area as characteristic facial pointer. While the output of the simulation contained a number of people in the room based on the number of faces that have been detected.

In testing this application uses five parameters. The first is the distance between the object and the camera, and the second is the intensity of light, and the last one is the change in angle rotate image inputan. best accuracy decision at the time of the first test was 98.3%, ie when the distance is 160cm and accuracy the second test was 100%, during the day, afternoon, and evening using a flash at night using a flash. And by the time the third experiment, the average system is not capable of detecting the number of people if the angle input image is replaced. The accuracy rate of the system as a whole is 96%.

Keywords: Calculation of Number of People, Shape Ratio, Android