

ABSTRACT

The rapid development of image processing has been applied in a variety of devices ranging from super computers to a device microcontroller. Image processing is also growing, is no longer just a static image analyzes, but began to analyze the video. Selection of the method used to be very krusial in analyzing the video. The higher the complexity of the algorithm chosen will affect the speed of response analysis.

The initial stage of the final project is done by designing a single object tracking using raspberry pi. In order to produce a quick response, the final project using algorithms sum table area. At this time the author Final narrow down the problem, which is tracking the position of an object, analyze the size of the object, and analyze the direction of motion of the object in realtime based microcontroller type B Raspberry Pi.

The results of this scheme is an object tracker using the Raspberry Pi Type B with an average speed of processing 8 fps process, the value of mean absolute error of determining the position coordinates x 2.8 mm and 2,133 mm for the y coordinate, and the value of mean absolute error of determining direction 2,1 degree.

Key Word : Video Processing, *sum area table*, Raspberry Pi.