

ABSTRACT

The rapid development of technology makes all groups compete to create or develop technology according to their needs, one of which is research on Traffic Sign Detection. This technology is implemented in the Advanced Driver Assistance System (ADAS). Detection is a stage to explore the possibility of a significant area being located. The detection result is an image containing Regions of Interest (ROI) to mark the object area. The area will be used as training data that will affect the detection process. Thus, a system was created that aims to detect signs applied to the Raspberry PI that works in real-time while processing the sign image from the camera Raspberry PI. The method of shape detection has 3 steps, starting from color segmentation, shape detection, and classification. This method can form a box with a boundingbox process that functions as a selection of information that needs to be processed so that system performance is not so heavy but has accurate accuracy. The detection success rate in this project uses SVM classification testing with training data accuracy of 96% and testing with HSV values with an average test percentage of 71.5%.

Keywords: *Traffic Road Sign, Shape Detection, Color Segmentation, Classification*