ABSTRACT

One of the health problems is color blindness. This disease is the inability to determine certain types of colors. The number of people with color blindness in Indonesia is increasing every year. Based on this problem, a color detection system was created to help color blind people based on machine learning using tensorflow. This system is made to detect the color of objects using tensorflow and K-NN algorithm for color classification, object is captured using the Raspi v2 camera module. This system can measure the accuracy of object detection and able to inform the detected color information in the form of sound using speakers.

Keywords: Color object detection, Raspberry Pi, K-NN, Tensorflow, Machine learning.