

ABSTRACT

The reduction of vision for the blinds triggers them to maximize the other senses such as sense of touch, sense of smell and hearing. Based on that, the advancement of technology can help them to overcome the problems for the blinds might have such as reading without need a help from other people.

The technology that are used in this final project are image processing using *raspberry pi 2* and Web cam logitech C525. The web cam logitech C252 was used in a way that it is capable to do image processing on the *raspberry pi 2*. The object that are used for this test is sentences written in black, after doing so the object will be processed using HSV using OCR introduction method. The result of the detection is a sound that comes from the signal using e-speak library in order for the blinds to understand it.

The result of this final project is that every written object with Ms Gothic font type, size 260 pt, and distance 125 cm can be read by the camera which is already connected to the *raspberry pi 2* with accuracy 71%.

Keywords : Visually Impaired, raspberrry pi, logitech c525, camera