

ABSTRACT

Many people who are blind in their daily life do not know the name of the product they buy. The solution to this solution to assist the visually impaired in recognizing food products is to use a tool called a detection system on food product packaging using a deep learning method. This system has input in the form of food product packaging images that can be taken from the Raspberry Pi camera. The image will be processed in Open CV with the deep learning method. After the process is complete, it will produce output in the form of text or text to speech issued by the speaker. So the existence of this system helps the visually impaired to know the name of the product they buy in their daily life. Therefore, in this final project, we have succeeded in detecting text on food product packaging using a raspberry pi camera. Results from 10 food products, 4 products with 100% yield, 3 products with 70% yield, 3 products with 0% yield.

Keywords: Raspberry Pi, Open CV, Deep Learning, Text Detector, Image Processing.