

The Machine Learning based Smart Assistant for Library Management and Book Reader for Blind People using Raspberry Pi

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Abstract: For people who love books and want to read books, they need good library management that organizes the library collection in such a way that it is easy to find and locate books. However, it is common for someone to spend time in the library looking for books and library management will provide support in finding the required material. For the blind and visually impaired, providing an audio format of a book or text can be a beneficial way of producing reading material. The whole process will be done by using Raspberry Pi and Optical Character Recognition (OCR), the Tesseract algorithm that captures the image, then text is extracted and the resulting text can be converted into speech using eSpeak module.

Keywords: Optical Character Recognition, Raspberry Pi, Image to text, Text to speech.