OPTICAL CHARACTER RECOGNITION FOR VISUALLY IMPAIRED PEOPLE USING TENSOR FLOW

There are many cultural, governmental, commercial and educational organization that manage large number of manuscript textual information. English being one of the most widely used language such organization include English documents. Text line segmentation in such document remains an open document analyses problem.

In this project, the model takes English text scanned image as an input. This image is analyzed in order to identify each letter or digit. When a character is recognized it converts it into braille language as well as in English language. The output is in the form of well recognized and understandable document.

Modules used in this project are input image,pre-processing, segmentation, extraction. Text document undergoes segmentation whose output is given to background cleansing in this stage all the noise is removed based on the area for the accurate detection of the text line.The textline is detected and segmented,each detected line is indicated by bounding box .It includes rescaling, increases in brightness, contrast, greyscaling, binarization.The system eliminates small text fragment in the background cleansing stage. After pre-pocessing step it finds all the connected documents then grouping and text line extraction and then conversion to braille language.

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