

OCR SYSTEM

Abstract:

Digitization the Handwritten or Photo characters was a manual process in before days. This was a time consuming thing and it is manually expensive. Such handwritten or image characters are difficult to read by visual-impaired people. This Traditional method can be overcome with the help of this OCR (Optical Character Recognition) System. In this project, we propose a deep learning- based OCR system which will be more accurate and efficient with the help of Intel OneAPI platform.

The proposed system uses a convolutional neural network(CNN)model to detect the characters from the image. The model is trained on a large Dataset of labelled images using the OneAPI Platform.

The Image is collected and organised for the classification of characters and letters. The characters are detected with CNN models and trained with OneAPI platform in accurate and efficient manner , Where text characters are extracted separately.

Further , The trained model can predict the sample data images in accurate and time-efficient way based on Intel machines , including CPU and GPU's. With Add-On feature , we will also try to implement audio as an output , which is very useful for visual- impaired people.

In conclusion, This OCR system using Intel OneAPI has potential to digitalize the handwritten and predict it in a higher accuracy and time-efficiency.

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