

ABSTRACT

Printed documents such as receipts or printed fractures are used by many companies after making buying and selling transactions between companies or companies by tender. Receipts or invoices have a section filled with human handwriting, therefore a tool is needed that can scan and recognize human handwritten letter patterns. Optical Character Recognition (OCR) provides the ability to detect text in a document to convert it into digital form, but OCR in handwriting has a little special treatment. This study uses OCR to create a portable scanner-type device that recognizes human handwriting and uses the Convolution Neural Network deep learning algorithm to extract its features. Convolutional Neural Network (CNN) is a highly used machine learning architecture that is motivated from the natural visual perception techniques of the human brain. The dataset used in the training model comes from A_Z Alphabet Dataset Kaggle.com. The test was carried out with the handwriting of 10 different people and got a maximum accuracy of 99.33% on certain writings and 89.14% on average accuracy.

Keywords: Portable Scanner, Optical Character Recognition, Handwriting Recognition, Convolutional Neural Network