
Abstract

Text Recognition is the topic of digital image processing that is being hotly discussed, various methods have been tried pinned and are still searching for what methods have the best accuracy. In this paper the author using Histograms of Oriented Gradient for feature extraction and Extreme Learning Machine for classification of data. The system will first do pre-processing to resize the image and then convert it to grayscale to facilitate the feature extraction process. After that the feature extraction process by HOG is to select the shape of the object in this paper in the form of handwriting. Then the Extreme Learning Machine classification will be carried out to group these objects according to the character of the letters contained in the handwritten image. This study resulted in an average of 74.69% micro F1 score and 73.03% macro F1 score in testing using a cell size of 30x30, block size of 30x30 and the number of hidden layer 3000 nodes.

Keywords: Extreme Learning Machine, Histograms of Oriented Gradient, Handwritten