Abstract

Optical Character Recognition (OCR) is One of application of technology in the field of pattern recognition and artificial intelligence as reader machine. This study presented to improve the ability of recognizing of letters latin Computer that is standard in the printed document. Research have been done to improve the ability of OCR system that is still have some difficulties such as, ambiguity in text and noise, even missclassification.

To overcome these cases, this study propose a method to minimize errors by optimizing the feature extraction with vertex chain code (VCC) and using Learning Vector Quantization (LVQ) as a method of classification. Acquire the VCC method is based on the elements of the value chain shows the original cell numbers indicate the vertex. LVQ learning in the competitive layer to be supervised automatically learn to classify input vectors and subsequent class a character depends on the distance between the input vector.

OCR system with VCC and LVQ method can recognize the Latin alphabet with good computer. Some misclassification occurs because letters latin are either similar shape or feature and the selected features are not sufficiently inseparating the different classes. Moreover, OCR systems are built is not yet able to handle the diversity of fonts, so the classification must be developed to handle more specialized for each category of the Latin alphabet.

Keywords:. OCR, Pattern Recognition, Letters Latin, Vertex Chain Code, LVQ