Abstract

This Last Project appoint a topic about character handwriting recognition using fuzzy logic that regard a character handwriting as a graph with direction, which the node consist of end points and intersection points while the edge consist of line, curve, and loop as basic step for features extraction sub-system, a neural network backpropagation for classification sub-system, and classic algorithm for perprocessing sub-system. This system accept *.bmp input image then the system will execute with three stage that are preprocessing, fuzzy feature extraction, and neural network backpropagation.

Testing purpose are to find out whether the system can recognize a character that obtained in input image, and to count average time process of the system. Testing using 5 sample character handwriting(every sample include 52 kind of charecter) from 5 volunteer. The dimension of input image is 106 x 114 with *.bmp format. The result has recognition rate 74,6% with average time process is 1,97 second for every character.

Keyword: Logika fuzzy, Neural network backpropagation, Citra Digital, Prepocessing, Fuzzy features extraction, Recognition rate.