ABSTRACT

In previous final assignment has been done handwritting detection achive up to 74,72% of accuration rate. Hidden Markov Model (HMM) is used as classification method, and Modified Direction Feature is used as exctraction feature method. System is limited to handwriting which each of character is separated.

In this final assignment, designed a system which can recognize the character of letters and numbers on handwritten with or without overlapping but each of character are not touching. In this system, the input is a scanned images of training data and test data that contains letters and numbers by handwritting. The early step of this system is pre-procssing training data and test data, then the data extracted by the Modified Direction Feature in order to get the characteristics of the image. After acquired traits, the image then classified by the Hidden Markov Model (HMM). System output as a text in .txt format.

From the tests, the designed system can achive an average accuracy of 70.44% with an average computation time of 2.07 second. The system is still not perfect because there is still accuracy of 20% for character 0 and 0% for word of E22.

Key Word : *handwritting, overlap, Modified Direction Feature, Hidden Markov Model, adaptive segmentation*