ABSTRACT

The handwriting very closely related to out lives. One is the writting of an address or post code on the letter delivery companies, money orders and goods. Service companies are still doing manual data entry process to date. Officers will enter a zip code into a database system so that it can be seen in full destination. If there is an automatic system that can recognize and read handwriting deirectly zip code, it will reduce the burden on the officers and can shorten the work flow in the enterprise services.

To address these purposes, there is a handwritten document recognition system with hign quality to print letters that have been developed for a long time with OCR (Optical Character Recognize). One drawback of the OCR system is to perform the separation and reading handwriting touching each other.

In this final project conducted the research process postcode based image recognition handwritteing that are touching each other using a segmentation algorithm foreground and background feature. This algorithm is an algorithm used to perform the separation process are touching each other postal code. Consist of several stages of thinning, the search of feature point is an end point, the search for the best segmentation line and the termination.

From this research, the system can read and recognize the zip code that read the hand and show the areas in question by zip code with maximum of 89,33 % accuracy rate for the value of the correlation threshold 0,7. But for correlation threshold system with other overlapping block size show the accuracy rate less than stable if compare with correlation threshold 0,8 show accuracy rate more than stable is range more than 85 % with computing time 1,35 seconds. For the value of different distance between two feature points determine the end point is the point of intersection of two produces the best performance of the system to be very good accuracy is 92,06 %.

Keyword: handwritten, postcode, thinning, background and foreground segmentation algorithm, correlation threshold.