ABSTRACT

The development of technology and increasingly rapid change make people in the world eager to learn a foreign language. One of the languages learned quite a lot by Indonesian people is Arabic. In addition to that, many people want to learn Arabic to facilitate them for reading Qur'an. Basic for learning Arabic is read Arabic letters (*hijaiyyah letters*) apart. It also should be a lot of practice it by reading the letters of the Arabic script hijaiyyah separate connection. Detection *hijaiyyah letter* of the Arabic is quite difficult due to many factors, one of them is there are some letters that are similar shape and only distinguished by a dot.

In this final project, has created an application that is able to separate the letters of the Arabic script hijaiyyah concatenated with the method of *Discrete Wavelet Transform* (DWT) for feature extraction and *Self Organizing Maps Neural Network* (SOM Neural Networks) for classification.

Results have been achieved is a system that can separate letters of the Arabic script hijaiyyah concatenated with a maximum accuracy rate 97.7% on the system offline. Letters that have been processed are 28 letters and input on the system is the Arabic concatenated script.

Keywords : hijaiyyah letter, Discrete Wavelet Transform, Self Organizing Maps Neural Network