

## ABSTRACT

In this final project, a method is presented to analyze the personality of handwriting using Artificial Neural Network Kohonen SOM (Self Organizing Maps). This neural network will do self-training for data input and clusterization for its output. Before doing the Kohonen process, there is preprocessing by extracting the features of the handwriting samples. The extracted features will be the input for Kohonen Network's training, which has some of parameters that was set. This parameter such as Learning Rate, neighborhood's radius and Epoch. Besides, there is also the setting for determine total of clusters by looking at its output target. Network's training with those parameters will result the weight and the accuracy of system.

After doing the analyzing and testing by modifying the parameter value, there is a conclusion that some of the parameters influence the accuracy of system. The parameters that influence are neighborhood's radius and the epoch value. While learning rate, does not give significant influence for the accuracy of system.

Keywords : *Artificial Neural Network, Kohonen SOM, Learning Rate, Neighborhood's radius, Epoch, Cluster*