

## Abstract

Character Recognition from the form using the system is needed in the real world such as the form on the bank. Certainly with the system can easier human activities to do work more effectively and efficiently for form .

In making the character recognition system have several steps that preprocessing, segmentation, feature extraction, and the learning algorithm. Feature extraction methods used in this final project is diagonal feature extraction methods. Expected by using a diagonal feature extraction methods of data obtained clearer information and accurate in distinguishing feature between the character with each other.

One algorithm learning that is probabilistic neural network learning which is a model that was formed in Bayesian modeling approach. Algorithm execution time is very fast.

Shown in this final project that there is the highest accuracy on the training process that is 99.68% while the highest accuracy of the testing process that is 96.15%. In terms of the average accuracy of the diagonal feature extraction left is better than right diagonal feature extraction.

**Keywords:** Form, Diagonal feature extraction, Probabilistic neural network Algorithm.