

Abstract

In general, a letter has the form of an intact and no damage. But sometimes there are also letters that were damaged as the intersection at the letter. In this final assignment builds an application to identify the letters, especially letters that have the intersection. In the letter pattern recognition is performed several activities, among others, include the image in the form of the latin alphabet bitmap and then perform the preprocessing, which among other binerisasi, segmentation, stretching, thinning, and feature extraction. While in the process of classification using fuzzy ARTMAP method using weighting changes based on certain parameters. The output of this application is the letter of the classification results.

In this final assignment training process is divided into training with intact and the combined sample letters (letters intact and truncated). While the tests were performed using the trained sample letters and letters that were not trained. Based on testing against several types of intersection of the horizontal (upper, middle, bottom) and vertical (left, center, right), then the average value of the greatest accuracy is middle horizontal and right vertical intersection 5% have 94.9% accuracy.

Keywords : Binerization, Segmentation, Stretching, Thinning, Feature Extraction, Fuzzy ARTMAP