Abstract

Fingerprint recognition is a human fingerprint identification system as a recognizable identity, fingerprint is often implemented on security systems in offices or as a security tool. In this research, will be implemented fingerprint recognition which is classified based on the pattern using backpropagation method and analyze the level to the accuracy of the backpropagation method. Then classified with Artificial Neural Network, so as to create a combination between the method of feature extraction and classification techniques with optimal accuracy. In this final project characteristic extraction done using GLCM (Gray-Level Co-Occurrence Matrix) successfully implemented on backpropagation method with the use of layer 1-3 layer layers and learning rate on each test used value 0.10 and obtained a great accuracy result that is 74 , 2% on testing using two hidden layers.

Keywords : Fingerprint recognition, Artificial Neural Network backpropagation, GLCM (Gray-Level Co-Occurrence Matrix)