ABSTRACT

Fingerprints have been widely used today. A study conducted to identify non-rotating fingerprints. These problems result in wasted time and lack of identification of a person. This error requires a technique or method that can make it easier to recognize the image of the fingerprint and will identify the owner of the fingerprint that can rotate.

The fingerprint recognition process starts from image data acquisition, image processing, and processing using the Weber Local Binary Pattern (WLBP) and Circularly Symmetric Gabor Feature (CSGF) methods. The fingerprint image will be matched with the existing image in the database using the Backpropagation algorithm. The results of the rotating fingerprint implementation produce an average accuracy rate of 72% using 85% training data partition and 15% test data with an accuracy of 81%.

Keywords: Weber Local Binary Pattern (WLBP) Method, Circularly Symmetric Gabor Feature (CSGF) Method, fingerprint, Back Propagation.