ABSTRACT

A person can be identified based on his identity and characteristics. Biometrics is a method of identifying people based on natural characteristics which include physiological characteristics as a basis. One of the physiological characteristics that can be developed in identifying a person is with the iris. Basically, the iris of each person is unique as well as detailed and high consistency differences for years without any surgery that causes damage.

In this final project, a personal identification system through iris has been done using the Compound Local Binary Pattern (CLBP) method as feature extraction and Support Vector Machine (SVM) as the isi classification method and using K-Nearest Neighbor classification as a comparison

The results of this final project that has been done designing personal identification with input images namely iris in the form of digital images is to produce the highest accuracy on the left eye by 89,7143% using 350 training images ad 350 testing images taken from 70 individuals with parameters using six features statistics on first-order feature extraction, as well as gaussian kernel functions and with the same method and K-Nearest Neighbor (K-NN) classification the highest accuracy on the left eye is 90%. Through this study, it can be concluded that the accuracy that has been obtained can explain that the system that has been made is able to identify someone through the iris of the eyes and the left eye more specifically for each individual so that the resulting accuracy is larger than the right eye.

Keywords: Biometric, Iris identification, CLBP, SVM, KNN