Biometric Patterns Of Eye Iris By Using Hidden Markov Model

by Nur Hadi Waryanto, Sri Andayani, Muhammad Fauzan, Titik Wulandari

ABSTRACT

Biometrics is an individual recognition system that consists of two kinds of modern and traditional. A biometric system is essentially a personal identification system by determining the authenticity of a physiological characteristic, or a particular behavior that the user possesses. Such biometric technology is defined as an automated method of identifying and authenticating a person's identity based on the user's physiological and behavioral characteristics.

The purpose of this research is to know the accuracy level of iris pattern identification using Hidden Markov Model with Gabor wavelet method, to know the iris feature extraction process as part of image processing process using Gabor wavelet method. The method used for data processing is by using Hidden Markov Model and Gabor Wavelet.

The accuracy of the iris identification system indicates that using the Hidden Markov Model with the Gabor Wavelet filter provides a lower accuracy value than using the 2D Order Statistic Filter (ORDFILT2). Gabor Wavelet filter gives 91.50% accuracy level while ORDFILT2 Filter gives 98.5% result.

Kata Kunci: *Biometric, Iris Eye, Gabor Wavelet*