

Abstract

Biometrics is a method of identity recognition for the human physical features; face, voice, iris, palm. This verification is much more reliable than conventional methods because in addition to ease of process, biometrics are always carried by humans. Compared with the faces, voices and palms, the iris has a promising safety level. This is because texture of the iris is unique, to any human twins have different iris texture.

In this thesis the authors applied the Contourlet Transform method for feature extraction and Biomimetic Pattern Recognition for the classification. The system uses CASIA Database Version 1.0. Data for above of 756 images the iris of the eye 108.

Results obtained from testing by applying Contourlet Transform and Biomimetic Pattern Recognition method, the system is able to obtain an accuracy of 96.91% using decomposition level 4, $\alpha = 0.50$ and $\beta = 0.99$.

Keyword : Biometrics, Contourlet Transform, Biomimetic Pattern Recognition