Abstract

Iris recognition systems are unavoidable in emerging security and authentication mechanisms. In this paper, we make a comparative study of performance of image transforms Discrete Cosine Transform (DCT), Haar wavelet and DCT wavelet, when they are used for iris verification. Initially, the entire 256x256 feature co-efficient matrix, obtained after applying DCT,
Haar wavelet or DCT wavelet transform to the image, is considered. The coefficients from bottom right of the image matrix, transformed using DCT, Haar wavelet or DCT wavelet, which contain minor information, are discarded gradually and the performance is recorded for all iterations.

Reference

- Database:Iris database is available on http://phoenix.inf.upol.cz/iris/download/
- Tze Weng Ng; Thien Lang Tay; Siak Wang Khor; , "Iris recognition using rapid Haar
Iris recognition using Partial Coefficients by applying Discrete Cosine Transform, Haar Wavelet and DCT Wavelet Transforms.


Index Terms

Computer Science

Signal Processing

Key words

Iris recognition  biometrics  DCT
Haar Transform
DCT wavelet
Partial Coefficients
Iris recognition using Partial Coefficients by applying Discrete Cosine Transform, Haar Wavelet and DCT Wavelet Transform.