Abstract

In this paper, we propose an algorithm that scans the WPD coefficients in a way that preserves the amplitudes and relative locations of certain high-magnitude approximation coefficients while discarding the rest of the transform coefficients. The proposed WPD scanning technique greatly improves the feature extraction capabilities of the standard WPD transform. When tested on the iris recognition problem using the CASIA database and the ANN classifier, the proposed system produces zero classification error and always outperforms the standard WPD system.
- Cairo Amman bank.
- Palacky University iris database. Available from:.

Index Terms

Computer Science
Artificial Intelligence
Keywords
Feature extraction  Wavelet packet decomposition (WPD)  Iris; Biometrics; Artificial neural network (ANN).