Abstract

Multimodal biometric plays a significant role in human identification, which overcomes the issues of unimodal biometric system. The proposed approach is based on fusion of two unique traits, ear and iris and to study their performances. The features of both traits are extracted using common method, Principal Component Analysis (PCA) technique mainly for dimensionality reduction without information loss and used for identification. The similarity between the test data and the training set is measured using Euclidean distance by setting a threshold value for each system. It is found that this proposed work performs slightly better than the systems where only ear or iris trait is used.


Index Terms

Computer Science
Pattern Recognition
Keywords
Ear  Iris  Segmentation  Principal Component Analysis  Fusion  Euclidean Distance