Abstract

The traditional approach towards human identification such as fingerprints, identity cards, iris recognition etc. lead to the improvised technique for face recognition. This includes enhancement and segmentation of face image, detection of face boundary and facial features, matching of extracted features against the features in a database, and finally recognition of the face. This research proposes a wavelet transformation for preprocessing the face image, extracting edge image, extracting features and finally matching extracted facial features for face recognition. Simulation is done using ORL database that contains PGM images. This research finds application in homeland security where it can increase the robustness of the existing face recognition algorithms.

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Index Terms
- Computer Science
- Image Processing
Keywords

Face recognition  Wavelet transformation  edge image extraction  feature extraction  match features