Abstract

Face recognition has been a fast growing, challenging and interesting area in real-time applications. A large number of face recognition algorithms have been developed for decades. The paper presents novel Haarlet Pyramid based face recognition technique. Here face recognition is done using the image feature set extracted from Haarlets applied on the image at various levels of decomposition. Here the image features are extracted by applying Haarlets on gray plane (average of red, green and blue. The proposed technique is tested on two image databases having 100 images each.
The results show that Haarlets level-3 and Haarlets level-4 outperforms other Haarlets, because the higher level Haarlets are giving very coarse texture features while the lower level Haarlets are representing very fine texture features which are less useful to differentiate images in face recognition.

Reference

Index Terms

Computer Science  Image Processing

Key words

Face recognition  Haarlet Pyramid  Haarlet Levels