Abstract

Face recognition has acquired abundant attention in market and research communities, but still remained very accosting in real time applications. It is one of the various techniques used for identifying an individual. The major factors affecting the face recognition system are pose, illumination, identity, occlusion and expression. The image variations due to the change in face identity are less than the variations among the images of the same face under different illumination, expression, occlusion and viewing angle. Among the several factors that influence face recognition, illumination and pose are the two major challenges. Next to pose and illumination, the major factors that affect the performance of face recognition are occlusion and expression. So in order to overcome these issues, we proposed an efficient face recognition system based on partial occlusion and expression. The similar blocks in the face image are identified. Then the occlusion can be recovered using the block matching technique. Expression detected by extracting the EMD feature and ANN is combined with the proposed method to provide an effective recognition technique. Finally, the face can be recognized by using the PCA. From the implementation result, it is proved that the proposed method recognizes the face images effectively.
References

- B. Kepenekci, F. B. Tek, and G. B. Akar, "Occluded face recognition by using gabor


Index Terms

Computer Science Pattern Recognition

Keywords

Face recognition Occlusion Detection Expression Block matching Algorithm Principal Component Analysis (PCA)