Abstract

Face recognition is the important field of pattern recognition. Discrete Wavelet Transform, (DWT), is known as a very powerful tool in the field of image processing, which extracts the feature vector to determine the performance of face recognition system. However, there are different decomposition levels of DWT. In this paper different decomposition levels of DWT integrated with a lot of good feature extraction methods are examined. Experiments on ORL face database showed that three levels of wavelet decomposition gives promising results and the hybrid method 2D-DWT_PCA_SVM gives high recognition rate and less time rather than other used methods.
A Study on the Impact of Wavelet Decomposition on Face Recognition Methods

References

- F. Bellakhdhar and K. Loukil, "Face Recognition Approach Using Gabor Wavelets,
A Study on the Impact of Wavelet Decomposition on Face Recognition Methods


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