Abstract

This paper introduces a new face recognition technique using Gabor Wavelet transform and Back propagation network. Face recognition being regarded as a fundamental technology of biometrics has been applied to a variety of areas, including computer vision and pattern recognition. In this proposed approach, the features of the query face image and database face images have been extracted using Gabor transform and trained using BPN. The main objective of this proposed system is to develop an efficient face recognition system by improving the efficiency of the existing face recognition systems. The proposed system has been developed to provide efficiency in terms of retrieval accuracy and precision. The precision improved by 100 % and average recall rate of up to 97 % for the database of 100 images. The efficiency of the proposed system obtained as 100%.
A New Face Recognition Technique using Gabor Wavelet Transform and Back Propagation Network


Index Terms

Computer Science  
Pattern Recognition

Keywords
Gabor Wavelet transforms (GWT)  back propagation Network (BPN)  eigenface