ABSTRACT

Face recognition is a process to recognize and identify someone by his face. Face recognition technology includes on biometric which uses characteristics of human. Nowadays, face recognition can be used for many things, for example: security, employee identity recognition, making many things more efficient and effective by reducing the using of password and identity card.

Algorithm which is used for implementation of face recognition system is by using Wavelet Gabor 2D Filter. Wavelet Gabor 2D Filter is used to get important feature of face. Total of feature vectors which is got is 100 vectors where these vectors represent specific features of every face. The output of this process is used as input in pattern recognition process and classification. Back propagation artificial neural network is used for this process.

The output of this project is to perform a system which is able to recognize and compare a certain pattern while also able to take the right decision on each input pattern. This system has grade system 84.82% to recognize, compare, and take the right decision.

Key Word   : Gabor, back propagation, artificial neural network