

ABSTRACT

Face is the part of human body which is easy to recognize. Face recognition is one of field in Biometrics which is improved very fast in the recent years. The reason is Face Recognition has implemented in many field of life such as identity authentication, surveillance and security, human-computer intelligent interaction, and film.

There are lots of methods have been proposed for Face Recognition. One of them is LDA (Linear Discriminant Analysis) combined with wavelet transform.

Pre processing of this system is feature extraction using wavelet transform which image is decomposed to get the coefficients of decomposition of detail image. The next step of process is classification. The classification uses LDA which is technique to maximize the discrimination of between class matrix and within class matrix. LDA is class specific linear method which can do the dimension reduction transformation. This method can make the elements of a class will be classed in the same class in the lower dimension.

After classification process is recognition process using Euclidean distance. Euclidean distance is used for measuring the distance between feature vectors of testing image. If feature vector of training image is close to feature vectors of testing image then it will be recognized as feature vectors which have been trained.

The highest accuracy of the testing result in this system is 98,25% for the testing0 using eight training data set.

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