Abstract

Face is one of the most charactesistic feature of human being. With this feature human can easily recognize one person to another. To recognize people, firstly human need to search/detect from an object that he see . In computer world, this process is known as face detection.

Researches on face detection has mainly done todays. From this resear ch many methode has been generated to solve face detection problems. One of them is appearence-based method. At this final ta sk, a new appearence-based method called Locality Preserving Projections (LPP) is used to solve the face detection case. LPP is a linear projection mapping method which can solve vary problems with also optimally preserve neighborhoods structure of data se t.

Based on test result, LPP method is able to produce a good accuracy between 60-83 percent. LPP is also good enough to be used on the varies image condition.

Keywords: image vector, LPP, transformation matrix, prepocessing