

Abstract

Human face recognition system has been greatly developed. Basically, face recognition technique can be divided as two major technique. They are feature based face recognition and template based face recognition. At these time, template based technique is commonly used because of its proven superiority. Where on template based technique, usually the similarity measurement don't use any information about what kind of variation is important to measure the similarity.

In this final project has been made a facial recognition software to recognize a face using intrapersonal variations of every individuals to measure the similarity. Similarity measurement using intrapersonal variations can be done with Bayes Classifier. Intrapersonal variations on each individuals are compressed using Principal Component Analysis (PCA), a widely known statistical feature compression technique,. By using PCA and similarity measurement that uses intrapersonal variations on each individuals, has been yielded a face recognition system with high recognition accuracy (reaching 100%) with good data compression using PCA.

Keywords: Intrapersonal Variations, Bayesian Classifier, Principal Component Analysis.