Abstract

Face Detection makes it possible to use the facial images of a person to authenticate him into secure system, for criminal identification, for passport verification etc. It is done by Principal Component Analysis (PCA). Face images are projected onto a face space that encodes best variation among known face images. The face space is collection of Eigen face. In the algorithm, initially video segmented using shot boundary detection techniques. Specifically, it can detect both the cut and gradual shot transitions in video. For detecting the shot boundary haar wavelet transform is used. In this method, each frame and its haar wavelet transform image is correlated for detection the shot. By setting the threshold of frame correlation shot boundaries can be detected. Video segmentation can be used in various application like video summarization, video search, and video annotation.
Face Detection using Principal Component Analysis (PCA)

Graduate School, 518055, "A Face Detection Algorithm Based on Modified Skin-color Model"; July 26-28, 2013, Xi'an, China, pp. 3896-3900, Shenzhen, China.

Index Terms

Computer Science
Pattern Recognition

Keywords
Face detection PCA Eigen Face Shot boundary Haar wavelet transform