Abstract

This paper presents an efficient method for detecting human eye in a full frontal face color image. Eye regions are characterized by low illumination, high density edges and high contrast as compared to other parts in frontal face image. This method uses basic color image processing and morphological operation to detect eyes. Using color based training algorithm, this technique first extracts skin region of the input image. Then morphological operation is applied for detection of eye boundary and light source reflection of eye, also known as eye dot. It gives finite number of eye candidates from which noise is subsequently removed. For full frontal face images, this method is found highly efficient and accurate for eye detection.
An Efficient Method for Eye Detection in Color Images using Morphological Operations


Index Terms

Computer Science
Image Processing
Keywords

Image conversion  Skin detection  Morphological operation  Noise elimination  Eye detection.