Abstract

While different iris segmentation techniques continue to appear, there has been a lack of recognition accuracy of existing methods with noisy iris dataset. To handle iris images (captured on less constrained conditions) with some types of noise (iris obstructions and specular reflection), the authors show the results of performance evaluation of their proposed iris segmentation technique over existing techniques. The performance of a proposed iris segmentation technique is evaluated based on the accuracy and time. To evaluate the performance, the authors use the most important points to compare their proposed technique with others, which is Equal Error Rate (EER). The system is implemented and tested using MATLAB Version 7.5.0.342 (R2007b) software. The environment where the experiments are performed is Compaq PC, Core 2 Duo Intel Pentium Processor (2.00 GHz), with 1GB RAM and Windows 7 operating system, a dataset of UBIRIS v1, UBIRIS v2 and CASIA-IrisV4 databases samples of iris data with different contrast quality.
Performance Evaluation of Proposed Segmentation Framework with Existing Techniques for Noisy Iris Images

- CASIA Iris Image Database, http://biometrics.idealtest.org/

Index Terms

Computer Science

Image Processing

Keywords

Noisy Iris Dataset Specular Reflection Edge Detection Iris Obstructions Upper
Eyelid