Abstract

Iris recognition has been a fast growing, challenging and interesting area in real-time applications. A large number of iris recognition algorithms have been developed for decades. The paper presents novel Haarlet Pyramid based iris recognition technique. Here iris recognition is done using the image feature set extracted from Haar Wavelets at various levels of decomposition. Analysis was performed of the proposed method, consisting of the False Acceptance Rate and the Genuine Acceptance Rate. The proposed technique is tested on an iris image database having 384 images. The results show that Haarlets level-5 outperforms other Haarlets, because the higher level Haarlets are giving very fine texture features while the lower level Haarlets are representing very coarse texture features which are less useful for discrimination of images in iris recognition.
IRIS Recognition using Texture Features Extracted from Haarlet Pyramid

Reference

- Developed by Dr. Libor Spacek. Available Online at: http://cswww.essex.ac.uk/mv/otherprojects.html. [last referred on 10 Nov 2010]
- www.wisegeek.com/what-is-iris-recognition-technology.htm
- Christel-Loïc TISSE, Lionel MARTIN, Lionel TORRES, Michel ROBERT, "Person identification technique using human iris recognition." Uploaded on online IEEE Xplore.
- "http://www.advancedsourcecode.com/irisdatabase.asp" for Palacky University iris
database.

**Index Terms**

Computer Science Biometrics

**Key words**

Iris recognition Haarlet Pyramid Haarlet Levels
False Acceptance Rate
Genuine Acceptance Rate