Abstract

The use of biometric systems has been increasingly encouraged by both government and private entities in order to replace or improve traditional security systems. The iris is commonly recognized as one of the most reliable biometric measures: it has a random morphogenesis and no genetic penetrance. In today’s world, where terrorist attacks are on the rise, employment of infallible security systems is a must. This makes Iris recognition systems unavoidable in emerging security & authentication. In this paper an iris recognition system based on various transformation methods is proposed. A novel approach of selecting feature vector for performance comparison is implemented. Also the performance comparisons of all the transformation methods is done to achieve better accuracy and efficiency on the basis of number of correct sample identified. The proposed system does not need any pre-processing and segmentation. DCT, HAAR, and WALSH, SLANT and KEKRE’S Transforms are tested on different size of feature vector to get best possible results.
- Http://phoenix.inf.upoml.cz/iris/download/, (referred on 18-08-2011, 10:00 p. m.).
- Http://www.cl.cam.ac.uk
- Christian Rathgeb, Andreas Uhl, \"Bit Reliability driven Template Matching in Iris Recognition\"; 978-0-7695-4285, 2010 IEEE.
Performance Comparisons of Novel Feature Vector Selection Methods for Iris Recognition


**Index Terms**

Computer Science
Pattern Recognition

**Keywords**

Biometric Recognition  Feature Vector  partial feature vector  Upper Diagonal feature vector