

A METHOD OF IMAGE PROCESSING BASED IRIS RECOGNITION FOR BIOMETRIC APPLICATION

HELEN PATRICK, R. RANIHEMAMALINI AND R SURESHBABU

Abstract

With the need for security systems going up, Iris recognition is emerging as one of the important methods of biometrics-based identification systems. This project basically explains the Iris recognition system developed by John Daugman and attempts to implement this algorithm in Matlab, with a few modifications. Firstly, image preprocessing is performed followed by extracting the iris portion of the eye image. The extracted iris part is then normalized, and IrisCode® is constructed using 1D gabor filters. Finally two IrisCodes are compared to find the Hamming Distance, which is a fractional measure of the dissimilarity. Experimental image results show that unique codes can be generated for every eye image.