

IRIS RECOGNITION SYSTEM BASED ON DCT MATRIX

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ABSTRACT

This paper presents a new iris coding method based on discrete cosine transform (DCT) Matrix coefficients. The feature extraction capabilities of the DCT Matrix are evaluated on largest publicly available eye image CASIA database. We have taken 990 images of 198 different eyes from the CASIA database. After successful implementation of the algorithm on the database, we have achieved 99.74% percent Recognition Rate (RR) with 0.19% false accepts and only 0.26% of false rejects. Individual feature bit of the iris are optimized for matching through XOR approach of Hamming distance calculation.

KEYWORDS: Segmentation, Normalization and Enhancement, Feature Extraction, Matching and Results