IRIS-AN EMERGENT BIOMETRIC TECHNOLOGY FOR PERSONAL AUTHENTICATION

KEZIA R BADHITI[1] & SUDHA THATIMAKULA[2]

[1]Assistant Professor, Department of Computer Science, Adikavi Nannaya University, Rajahmundry, Andhra Pradesh, India

[2]Professor, Department of Computer Science, Padmavathi Mahila University, Tirupati, Andhra Pradesh, India

ABSTRACT

Identification of a Person by using Physiological or Behavioral characteristics is critical in wide range of applications. Of all the physiological characteristics Iris can be considered as the most Biometric Technology due to its excellent features. Biometric Authentication has become the most secured means to automatically identify individuals without requiring them to carry ID cards or memorize passwords.

This paper explains how Iris can be considered as the most efficient Biometric technology. Iris recognition system includes mainly iris Image Acquisition, Iris Liveness Detection, Iris Image Quality Assessment, Iris Recognition. Iris Recognition stage includes Segmentation, Normalization, Feature Extraction and Matching.

This algorithm improves the speed and accuracy of the segmentation, error rate is reduced by accepting only the clear images. The Hough Transform, polynomial fitting technique, introducing specular reflections on the CASIA iris images and some morphological Operations are introduced for the effective output.

KEYWORDS: Identification, Physiological, Behavioral, Authentication, Iris Image Acquisition, Liveness Detection, Feature Extraction, Matching