

# Iris Recognition using GLCM and Wavelet Moments with Neural Network Classifier

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*Abstract* –The recognition of the iris is one of the most booming biometric modalities in recent years, due to its unique character as a biometric and biological feature, which makes identification and verification systems based in iris are one of the most accurate and very difficult to impersonate.

We present a modular neuronal network architecture for a system of recognition of people through the biometric measurement of the human iris. In this system, a database of the human iris is processed by means of image processing methods. The coordinates of the center and radius of the iris were obtained for then perform a cut of the area of interest eliminating the noise around the iris. The inputs to the modular neural network architecture were the processed iris images and the exit is the number of the person identified. The integration of the modules was done with the integrator of the gate network type. This paper proposes the hybridization of features like GLCM and wavelet moments for training to neural network (NN). Calculated accuracy of hybrid based approach claims 97.1% with 60:40 ratio of training and testing respectively.

*Keywords* –GLCM, Iris, NN, Wavelet Moments.