

# Hybrid Features Based Iris Recognition using Neural Network Classifier

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*Abstract* – This paper presents a neural network (NN) architecture for a system of recognition of people through the biometric measurement of the iris. In this system, a database of the human iris is processed by means of image processing methods. The coordinates of the centre and radius of the iris are obtained and a cut of the area of interest is performed eliminating the noise around the iris. The inputs to the neural network architecture are the processed iris images and the output is the number of the person identified. This work proposes the hybridization of features like Gabor wavelet, grey level difference matrices (GLDM) and wavelet moments for extracting features from the images to train the neural network. The classification accuracy obtained with the hybrid approach on the images is 98.6% with 60:40 ratio of training and testing respectively.

*Keywords* – Gabor Wavelet, GLDM, Neural Network, Wavelet Moment.