

## **CLASSIFICATION OF FACIAL IMAGES USING WAVELET FILTERS AND NEURAL NETWORKS**

**PATIL A. M.<sup>1</sup>, KOLHE S. R.<sup>2</sup> AND PATIL P. M.<sup>3</sup>**

<sup>1</sup>Department of Electronics and Telecommunication Engineering,  
J.T.Mahajan College of Engineering, Faizpur, India

<sup>2</sup>Department of Computer Science,  
North Maharashtra University, Jalgaon, India,

<sup>3</sup>Director RMD-Singhgad Technical Campus  
Warje, Pune, India,

### **Abstract**

The paper presented describes a biometric face identification method based on frontal face images that combines the Wavelets Theory and back-propagation neural network. We will use the wavelet transformed domain in order to reduce the dimensionality of the input image, and neural net classifier that will perform the recognition process. Experiments were carried out on ORL standard face database; results show better recognition accuracies.

-----  
**Keywords** : Wavelet transforms dimensionality reduction, back-propagation neural network, and facial features extraction.