

# Lung Pattern Classification by Using Artificial Neural Network

**B. Buvaneswari**

Assistant Professor, Department of Electronics & Communication

Thangavelu Engineering College, Chennai, India

buvaneswari2894@gmail.com

**Abstract:** Lung disease are the disorders that affect the lungs, the organ allow us to breathe and it is the most common medical conditions worldwide especially in India. The disease such as pleural effusion and normal lung are detected and classified in this work. It presents a computer aided classification in computer tomography images of lungs developed using artificial neural network-back propagation network. The purpose of the work is to detect and classify the lung disease by effective feature extraction through dual tree complex wavelet transform and gray level co-occurrence matrix features. We propose and evaluate the artificial neural network-back propagation network designed for classification of interstitial lung disease pattern. The parameter gives the maximum classification accuracy. Then we propose fuzzy clustering to segment the lesion part from abnormal lung.

**Keywords:** Segment lesion, Fuzzy Clustering, DTCWT, ANN- BPN