**ABSTRACT**

*Breast cancer is one of the fatal disorders causing death in people and second most common reason of cancer death in women. Instead of its fatal nature, extent of damage and cancer spreading can be reduce with good possibility if diagnosed in early stage .In this paper an artificial neural network inspired from biological neural network is used for pattern classification of benign and malignant cells. A feed forward neural network model with back propagation learning algorithm for training the neural network using breast cancer database is simulated with all the variable network constraints to make it efficient, robust and fault tolerated pattern classifier.*