

Conclusion

The healthcare system is an integral part of the society that ensures that every individual gets effective diagnosis and treatment. It also performs researches to combat new diseases, viruses and other ailments. Health is a crucial factor for deciding the capabilities of any individual and thus, a healthy life is a need for everyone. The field of medical science aids this ubiquitous need of good health. In this technologically advancing, fast paced world, integrating new technology in the field of healthcare has become essential and inevitable. Technology helps in making ailment diagnosis, treatment, medicine prescription, etc

more efficient and less time consuming. It also reduces the need of trained work force.

Thus, implementing various technologies in healthcare is a crucial step in advancement of medical sciences. This paper examines various approaches that use ANN to diagnose breast cancer, and compares Multi-Layer Perceptron Neural M. Desai and M. Shah Clinical eHealth 4 (2021) 1–11

8Network and Convolutional Neural Network based on their accuracy of diagnosis and breast cancer classification. Convolutional Neural network is explained in terms of architecture and its working. Then various researches that use CNN for breast cancer detection are examined. Then, Multi-Layer Perceptron Neural Networks are explained with its architecture and working, followed by an elaborate examination of various researches that use MLP-NN for breast cancer diagnosis and classification. Convolutional neural network has convolution and pooling layers that make it the better choice for complex image classifications, however, upon comparison from examination of various experiments, CNN shows higher accuracy than MLP in diagnosing and classifying breast cancer cells.

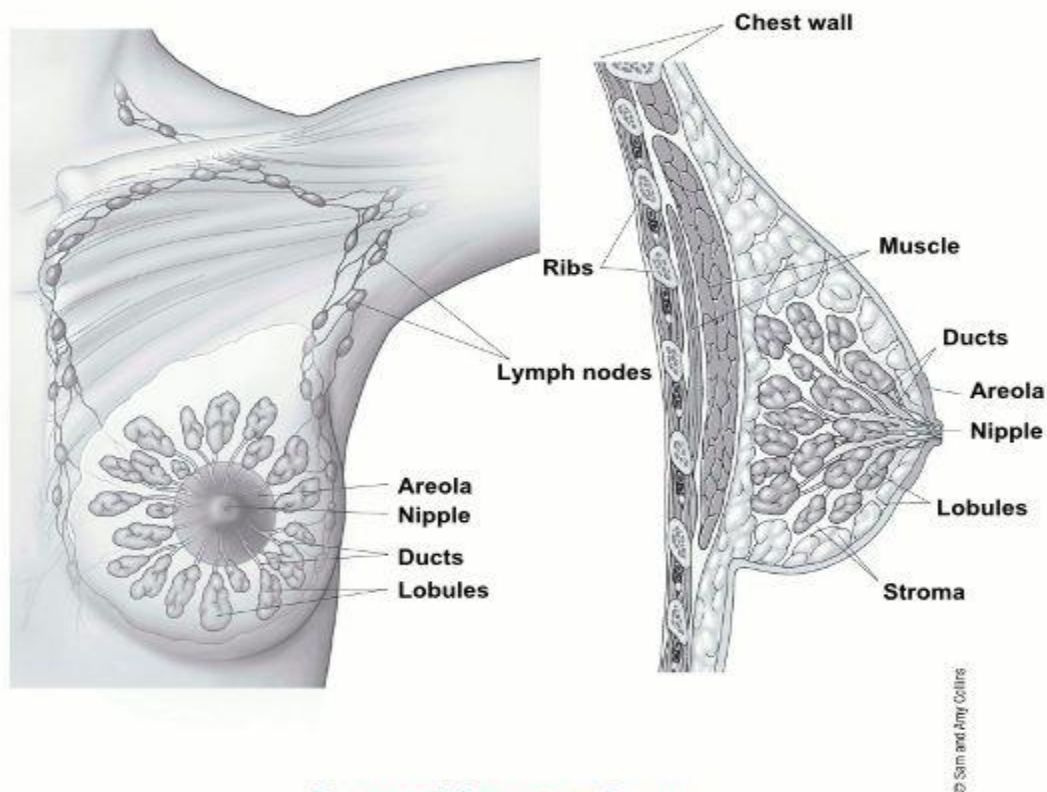
Majority of results propose that CNN gives a high accuracy as various layers like convolutional layer, pooling layer, and fully connected layer are incorporated. The numbers of hidden layers need to be minimised and using artificial meta plasticity in MLP can help minimise error. MLP is closely as efficient as CNN, but CNN shows results with higher accuracy. Yet, the most accurate result can be obtained upon elaborate experiment of breast cancer diagnosis and classification using same dataset in both CNN and MLP-NN under similar conditions of testing and training.

But, implementing ANN in breast cancer diagnosis and classification is the need of the hour, in order to reduce work load on doctors who each have to perform diagnosis on several patients per day, improve efficiency and also help women diagnose breast cancer

themselves safely by extending this technology to make safe and handy mobile applications.

After skin cancer, breast cancer is the most common cancer diagnosed in women in the United States. Breast cancer can occur in both men and women, but it's far more common in women.

Substantial support for breast cancer awareness and research funding has helped created advances in the diagnosis and treatment of breast cancer. Breast cancer survival rates have increased, and the number of deaths associated with this disease is steadily declining, largely due to factors such as earlier detection, a new personalized approach to treatment and a better understanding of the disease.



Normal breast tissue