Abstract

Various machine learning algorithms are being used in healthcare today for better analysis and prediction of disease. Machine learning has enabled us to extract knowledge from the huge and complex healthcare data. This paper discusses about the breast cancer recurrence data. Breast cancer is a very common type of cancer in women. It usually occurs at the age of 50 or above. But these days it can be seen in younger women. Some women are the higher risk as compared to other but that totally depends on the personal medical history, hereditary or changes in gene. It is very important to diagnose the breast cancer in early stage. This will not only help in treating the cancer but also prevent it from reoccurring. This calls for the need of real time streaming of data and analysis of disease in real time. In this paper we have compared three algorithms J48 decision tree algorithm, naïve bayes algorithm and multilayer perceptron (MLP) algorithm. We have compared them on the basis of accuracy, sensitivity, specificity and Area under ROC curve on two type of dataset, training set and testing set.

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**Index Terms**

Computer Science | Biomedical

**Keywords**

Machine learning, J48 decision, Naïve Bays, Multilayer Perceptron (MLP), Breast Cancer.