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| Title | Performance Evaluation of Data Mining Classification Algorithms for Predicting Breast Cancer | | |
| Author(s) Name | Nyme Ahmed, Rifat-Ibn-Alam, Syed Nafiul Shefat | | |
| Contact Email(s) | nyme.ahmed@aiub.edu | | |
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| Abstract |  |
| The most prevalent cause of death among women is breast cancer. At an early stage, predicting breast cancer enhances the probability of a successful cure. It requires a breast cancer prediction technology capable of classifying a breast tumor as dangerous malignant or harmless benign. This is especially true in the medical field, where classification methods are often used for finding and investigation to make decisions for the disease. This study examines the performance of six classification algorithms of data mining which are Logistic Regression classifier, Naïve Bayes classifier, Decision Tree, Random Forest Classifier, Support Vector Machine, and K-Nearest Neighbors on the Wisconsin Breast Cancer (original) dataset. The principal purpose is to measure the performance of each algorithm in terms of their accuracy, precision, sensitivity, and specificity. The findings indicate that the accuracy of Support Vector Machine has the greatest rate (97.20 %) and the lowest error rate when determining if a woman has a malignant or benign tumor. | |