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HEART DISEASES PREDICTION USING CLASSIFICATION

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ABSTRACT

Over the past ten years, heart disease has been the leading cause of death worldwide. In the United States alone, heart disease claims the lives of nearly one person every minute. Researchers have been assisting medical personnel in the identification of heart disease by employing a variety of data mining approaches. On the other hand, fewer tests are needed when data mining techniques are used. To lower the number of heart disease-related deaths, a rapid and effective detection method is required. Among the useful techniques for data mining is the decision tree. This study examines several categorization algorithms to improve heart disease diagnostic accuracy. Neural networks, Support Vector Machines(SVM), Logistic regression and Navie Bayes algorithms are employed. The algorithms' performance is tested and validated using pre-existing datasets of patients with heart disease from the UCI repository's Cleveland database. There are 13 attributes and 303 instances used for the study. Ten-fold cross validation method is used, and among all Naïve bayes classifier and Neural Network gave highest accuracy of 84% compared to other classifiers.

KEYWORDS: Navie Bayes; Support Vector Machine; Neural Network, Logistic Regression; Classification

Article History

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