Predictive Risk Factors of Heart Disease using an Efficient Classification based Approach

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Abstract

Medical data mining used content, structure and methods to analyze the medical data. Data mining techniques and machine learning algorithms play a very important role in this area. Advanced data mining techniques can be used to discover hidden pattern in data. The term Heart disease encompasses the various diseases that affect the heart. Prediction and diagnosing of heart disease become a challenging factor faced by doctors and hospitals both in India and abroad. The researchers accelerating their research works to develop a software with the help machine learning algorithm which can help doctors to take decision regarding both prediction and diagnosing of heart disease. Several data mining data classification techniques like to Decision Tree, Artificial neural networks (ANNs), and Support Vector Machine (SVM), Naïve Bayes, KNN and rule based classifier are used to classifies disease dataset. Performance of these techniques is compared through sensitivity, specificity, accuracy, error rate, True Positive Rate and False Positive Rate. In this paper we proposed a new and more accurate techniques to classify heart disease. Proposed approach is based on dividing of dataset and used responsible symptoms based generations and combinations of these patterns.
to predict heart disease.

References


Index Terms

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Keywords

Prediction, Disease, Patterns, diagnosis, Symptoms