Prediction of Cardiovascular Diseases using Support Vector Machine and Bayesian Classification

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Abstract

Cardiovascular disease is a broad team for a range of diseases affecting heart and blood vessels. Cardiovascular disease are the number one cause of death globally. The health care industry contains lots of medical data, therefore data mining techniques are required to discover hidden patterns and to make decision effectively in prediction of heart diseases. By applying data mining techniques, valuable knowledge can be extracted from health care systems. Data mining classification techniques like Naïve Bayesian and Support vector machine (SVM) are explained in this paper with their benefits and limitations. Data mining will help doctors to extract useful information from a huge dataset. In proposed research pre-processing uses techniques like noise removal, discarding records with missing data, filling default values if applicable and classification of attributes for decision making at different levels. This paper has predicted accuracy, specificity and sensitivity using a classifier. A classifier will predict whether a person has heart disease or not by using machine learning techniques like Support Vector Machine (SVM) and Naïve Bayes.
References


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Index Terms

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Keywords

Classification; Support Vector Machine (SVM); Naïve Bayes