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(57) Abstract :
Predicting heart disease is regarded as one of the most difficult challenges in the healthcare profession. To predict cardiac disease, researchers employed a variety of algorithms including LDA, RF, GBC, DT, SVM, and KNN, as well as the feature selection algorithm sequential feature selection. For verification, the system employs the K-fold cross-validation approach. These six strategies were used to conduct the comparative study. The Dataset for Cleveland, Hungray, Switzerland, and Long Beach V, as well as the Dataset Heart Statlog Cleveland Hungary, were used to assess the models performance. For both Hungary, Switzerland & Long Beach V and Heart Statlog Cleveland Hungary Dataset, Random Forest Classifier SFS and Decision Tree Classifier SFS produced the highest and almost identical accuracy values (100%, 99.40% and 100%, 99.76% respectively). The findings were compared to previous research that focused on cardiac prediction. In the future, we hope to extend the model even further so that it may be used with various feature selection techniques; another possibility is to use a random forest classifier. The major goal of this study is to improve on previous work by developing a new and unique technique for creating the model, as well as to make the model relevant and easy to use in real-world situations.

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