

Accuracy Comparison of Inlier Method and Random Row Method (Heart-disease)

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Abstract

Heart disease is the leading cause of death in the world over the past 10 years. Researchers have been using several data mining techniques to help health care professionals in the diagnosis of heart disease patients. Decision Tree is one of the data mining techniques used in the diagnosis of heart disease showing considerable success. K-means clustering is one of the most popular clustering techniques; however initial centroid selection strongly affects its results. In this paper, heart-disease dataset is considered for study. The implemented system will be useful to find out the patient's level in the heart-diseases. This paper implements integrating initial centroid selection of the k-means clustering such as inlier and random row methods with decision tree in the diagnosis of heart disease patients. The result shows that integrating k-means clustering with decision tree with initial centroid selection could enhance the accuracy in diagnosing heart disease patients. It also shows that the inlier initial centroid selection method could achieve higher accuracy than random row initial centroid selection methods in the diagnosis of heart disease patients.