A Data mining Model for predicting the Coronary Heart Disease using Random Forest Classifier

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ICON3C - Number 3

Year of Publication: 2012

Authors:
A. Sheik Abdullah
R. R. Rajalaxmi

Abstract

Coronary Heart Disease (CHD) is a common form of disease affecting the heart and an important cause for premature death. From the point of view of medical sciences, data mining is involved in discovering various sorts of metabolic syndromes. Classification techniques in data mining play a significant role in prediction and data exploration. Classification technique such as Decision Trees has been used in predicting the accuracy and events related to CHD. In this paper, a Data mining model has been developed using Random Forest classifier to improve the prediction accuracy and to investigate various events related to CHD. This model can help the medical practitioners for predicting CHD with its various events and how it might be related with different segments of the population. The events investigated are Angina, Acute Myocardial Infarction (AMI), Percutaneous Coronary Intervention (PCI), and Coronary Artery Bypass Graft surgery (CABG). Experimental results have shown that classification using
Random Forest Classification algorithm can be successfully used in predicting the events and risk factors related to CHD.

References

- L. Breiman and A. Cutler &quot; www. stat. berkeley. edu&quot;

Index Terms

Computer Science
Emerging Trends in Technology
Keywords
Coronary Heart Disease  Decision Trees  Random Forest