

LITREATURE SURVEY ON VISUALISING AND PREDICITON OF HEART DISEASE WITH AN INTERACTIVE DASHBOSRD & INFORMATION GATHERING

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Team ID	PNT2022TMID40157
Project Name	Visualising and prediction of heart disease with an interactive dashboard
Maximum Marks	2 Marks

Bo Jin, Chao Che et al. (2018) proposed a “Predicting the Risk of Heart Failure With EHR Sequential Data Modeling” model designed by applying neural network. This paper used the electronic health record (EHR) data from real-world datasets related to congestive heart disease to perform the experiment and predict the heart disease before itself. We tend to used one-hot encryption and word vectors to model the diagnosing events and foretold coronary failure events victimization the essential principles of an extended memory network model. By analyzing the results, we tend to reveal the importance of respecting the sequential nature of clinical records. Aakash Chauhan et al. (2018) presented “Heart Disease Prediction using Evolutionary Rule Learning”. This study eliminates the manual task that additionally helps in extracting the information (data) directly from the electronic records. To generate strong association rules, we have applied frequent pattern growth association mining on patient’s dataset. This will facilitate (help) in decreasing the, amount of services and shown that overwhelming majority of the rules helps within the best prediction of coronary sickness.

Ashir Javeed, Shijie Zhou et al. (2017) designed “An Intelligent Learning System based on Random Search Algorithm and Optimized Random Forest Model for Improved Heart Disease Detection”. This paper uses random search algorithm (RSA) for factor selection and random forest model for diagnosing the cardiovascular disease. This model is principally optimized for using grid search algorithmic program.

Two forms of experiments are used for cardiovascular disease prediction. In the first form, only random forest model is developed and within the second experiment the proposed Random Search Algorithm based random forest model is developed. This methodology is efficient and less complex than conventional random forest model. Comparing to conventional random forest it produces 3.3% higher accuracy. The proposed learning system can help the physicians to improve the quality of heart failure detection.

“Effective Heart Disease Prediction Using Hybrid Machine Learning Techniques” proposed by Senthilkumar Mohan, Chandrasegar Thirumalai et al. (2019) was efficient technique using hybrid machine learning methodology. The hybrid approach is combination of random forest and linear method. The dataset and subsets of attributes were collected for prediction. The subset of some attributes were, chosen from the pre-processed knowledge(data) set of cardiovascular disease. After prep-processing, the hybrid techniques were applied and diagnosis the cardiovascular disease.

K.Prasanna Lakshmi, Dr. C.R.K.Reddy (2015) designed “Fast Rule-Based Heart Disease Prediction using Associative Classification Mining”. In the proposed Stream Associative Classification Heart Disease Prediction (SACHDP), we used associative classification mining over landmark window of data streams. This paper contains two phases: one is generating rules from associative classification mining and next one is pruning the rules using chi-square testing and arranging the rules in an order to form a classifier. Using, these phase to predict the heart disease easily.

M.Satish, et al. (2015) used different Data Mining techniques like Rule based, Decision Tree, Navie Bayes, and Artificial Neural Network. An efficient approach called pruningclassification association rule (PCAR) was used to generate association rules from cardiovascular disease warehouse for prediction of Heart Disease. Heart attack data warehouse was used for pre-processing for mining. All the above discussed data mining technique were described.

Lokanath Sarangi, Mihir Narayan Mohanty, Srikanta Pattnaik (2015) “An Intelligent Decision Support System for Cardiac Disease Detection”, designed a, cost efficient model by using genetic algorithm optimizer technique. The weights were optimized and fed as an input to the given network. The accuracy achieved was 90% by using the hybrid technique of GA and neural networks.

“Prediction and Diagnosis of Heart Disease by Data Mining Techniques” designed by Boshra Bahrami, Mirsaeid Hosseini Shirvani. This paper uses various classification methodology for diagnosing cardiovascular disease. Classifiers like KNN, SVO classifier and Decision Tree are used to divide the datasets. Once the classification and performance evaluation the Decision tree is examined as the best one for cardiovascular disease prediction from the dataset.

Mamatha Alex P and Shaicy P Shaji (2019) designed “Prediction and Diagnosis of Heart Disease Patients using Data Mining Technique”. This paper uses techniques of Artificial Neural Network, KNN, Random Forest and Support Vector Machine. Comparing

with the, above mentioned classification techniques in data mining to predict the higher accuracy for diagnosing the heart disease is Artificial Neural Network.

Conclusion :

In this paper, a literature survey of review delivers the concept of various techniques has been studied for diagnosing the cardiovascular disease. Use of big data, machine learning along with data mining can provide promising results to bring the most effective accuracy in analysing the prediction model. The main aim of this paper diagnosing the cardiovascular disease or the heart disease and using different methods and many approaches to get prediction.

Reference :

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A LITERATURE SURVEY OF PREDICTING HEART DISEASE M. Preethi, Dr. J. Selvakumar.