

LITERATURE SURVEY

Date	21 September 2022
Team ID	PNT2022TMID39449
Project Name	Visualizing And Predicting Heart Diseases With An Interactive Dash Board
Maximum Marks	4 Marks

TITLE: PREDICTING THE RISK OF HEART FAILURE WITH EHR SEQUENTIAL DATA MODELLING

AUTHOR: Bo Jin, Chao Che et al

YEAR: 2018

DESCRIPTION:

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.

TITLE: PREDICTION AND DIAGNOSIS OF HEART DISEASE BY DATA MINING TECHNIQUES

AUTHOR: Boshra Bahrami, Mirsaeid Hosseini Shirvani

YEAR: 2015

DESCRIPTION:

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.

TITLE: AN INTELLIGENT DECISION SUPPORT SYSTEM FOR
CARDIAC DISEASE DETECTION

AUTHOR: Lokanath Sarangi, Mihir Narayan Mohanty,

Srikanta Pattnaik

YEAR: 2015

DESCRIPTION:

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.

TITLE: FAST RULE-BASED HEART DISEASE PREDICTION USING ASSOCIATIVE CLASSIFICATION MINING

AUTHOR: K.Prasanna Lakshmi, Dr. C.R.K.Reddy

YEAR: 2015

DESCRIPTION:

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.

TITLE: APPLIED DATA MINING AND MACHINE LEARNING
ALGORITHMS NAMELY DECISION TREE (J48 algorithm), NAIVE
BAYES AND ARTIFICIAL NEURAL NETWORKS(ANN) FOR HEART
DISEASE PREDICTION

AUTHOR: A.Taneja

YEAR: 2013

DESCRIPTION:

In 2013, A. Taneja, applied data mining and machine learning algorithms namely Decision Tree (J48 algorithm), Naive Bayes and Artificial Neural Networks (ANN) for heart disease prediction. A dataset of 7339 instance with 15 attributes has been taken from PGI Chandigarh. WEKA 3.6.4 tool was used for the experiment. For model training and testing 10-Fold Cross Validation techniques is used randomly. Best First Search method was used to select the best attributes from the already available 15 attributes and among them only 8 attributes has been selected. Each experiments was done on two different scenarios, first one containing all 15 attributes and the second case only 8 selected attributes. From all these experiments comparative results has been obtained and from these comparative results it has been found that J48 pruned in selected attributes case has performed best in accuracy with 95.56% and Naive Bayes with all attributes case gives less accuracy 91.96% but takes least time to build a model in the whole experiment.

REFERENCES:

[1] Bo Jin ,Chao Che, Zhen Liu, Shulong Zhang, Xiaomeng Yin, And Xiaopeng Wei, “Predicting the Risk of Heart Failure With EHR Sequential Data Modeling” ,IEEE Access 2018.

[2] Boshra Bahrami, Mirsaeid Hosseini Shirvani, “Prediction and Diagnosis of Heart Disease by Data Mining Techniques”, Journal of Multidisciplinary Engineering Science and Technology (JMEST) ISSN: 3159-0040 Vol. 2 Issue 2, February–2015.

[3] Lokanath Sarangi, Mihir Narayan Mohanty, Srikanta Pattnaik, “An Intelligent Decision Support System for Cardiac Disease Detection”, IJCTA, International Press 2015.

[4] K.Prasanna Lakshmi, Dr. C.R.K.Reddy, “Fast Rule-Based Heart Disease Prediction using Associative Classification Mining”, IEEE International Conference on Computer, Communication and Control (IC4-2015).

[5] A. Taneja, “Applied Data Mining and Machine Learning Algorithms” namely Decision Tree (J48 algorithm), Naive Bayes and Artificial Neural Networks (ANN) for heart disease prediction(2013).