TITLE: Heart Disease Prediction using Machine Learning Techniques

AUTHOR: S Vijeta Sharma, Shrinkhala Yadav, Manjari Gupta

YEAR: 2020

As per the recent study by WHO, heart related diseases are increasing. 17.9 million people die every-year due to this. With growing population, it gets further difficult to diagnose and start treatment at early stage. But due to the recent advancement in technology, Machine Learning techniques have accelerated the health sector by multiple researches. Thus, the objective of this paper is to build a ML model for heart disease prediction based on the related parameters. We have used a benchmark dataset of UCI Heart disease prediction for this research work, which consist of 14 different parameters related to Heart Disease. Machine Learning algorithms such as Random Forest, Support Vector Machine (SVM), Naive Bayes and Decision tree have been used for the development of model. In our research we have also tried to find the correlations between the different attributes available in the dataset with the help of standard Machine Learning methods and then using them efficiently in the prediction of chances of Heart disease. Result shows that compared to other ML techniques, Random Forest gives more accuracy in less time for the prediction. This model can be helpful to the medical practitioners at their clinic as decision support system.

TITLE: Effective Heart Disease Prediction Using Hybrid Machine Learning Techniques

AUTHOR: Senthilkumar Mohan, Chandrasegar Thirumalai et al.

YEAR: 2019

It 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 disgnosis the cardiovascular disease.

TITLE: Prediction of Heart Disease Using Machine Learning Algorithms

AUTHOR: Mr.Santhana Krishnan.J, Dr.Geetha.S

YEAR: 2019

This Paper predicts heart disease for Male Patient using Classification Techniques. The detailed information about Coronary Heart diseases such as its Facts, Common Types, and Risk Factors has been explained in this paper. The Data Minin tool used is WEKA (Waikato Environment for Knowledge Analysis), a good Data Mining Tool for Bioinformatics Fields. The all three available Interface in WEKA is used here; Naive Bayes, Artificial Neural Networks and Decision Tree are Main Data Mining Techniques and through this techniques heart disease is predicted in this System. The main Methodology used for prediction is Decision Trees like CART, C4.5, CHAID, J48, ID3 Algorithms, and Naive Bayes Techniques.

TITLE: Predicting the Risk of Heart Failure With EHR Sequential Data Modeling.

AUTHOR: Bo Jin , Chao Che et al

YEAR: 2018

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.