Literature Review

Paper Reviewed

1. Benish Fida, Muhammad Nazir, Nawazish Naveed, Sheeraz Akram **Heart disease classification ensemble optimization using genetic algorithm** IEEE (2011), pp. 19-25

2. Animesh Hazra, Arkomita Mukherjee, Amit Gupta, Asmita Mukherjee, “Heart Disease Diagnosis and Prediction Using Machine Learning and Data Mining Techniques: A Review”, Research Gate Publications, July 2017, pp.2137-2159.

3. HeonGyu Lee, Ki Yong Noh, Keun Ho Ryu **Mining biosignal data: coronary artery disease diagnosis using linear and nonlinear features of HRV** LNAI 4819: emerging technologies in knowledge discovery and data mining (May 2007), pp. 56-66

4. Mahdi Vasighi, Zahraei Ali, Saeed Bagheri, Jamshid Vafaeimanesh**Diagnosis of coronary heart disease based on Hnmr spectra of human blood plasma using genetic algorithm-based feature selection**

5. Mohammed Shafennor Amin, *et al.***Identification of Significant features and data mining techniques in predicting heart disease** Telematics Inf (2019), pp. 82-93

6. J. Nahar, T. Imam, K.S. Tickle, Y.P.P. Chen**Computational intelligence for heart disease diagnosis: a medical knowledge driven approach** Expert Syst Appl, 40 (1) (2013), pp. 96-104

7. S.B. Patil, Y.S. Kumaraswamy**Extraction of significant patterns from heart disease warehouses for heart attack prediction** Int. J. Comput. Sci. Netw. Secur(IJCSNS), 9 (2) (2009), pp. 228-235

8. Shraddha Chauhan, Bani T. Aeri**The rising incidence of cardiovascular diseases in India: assessing its economic impact** J. Prev. Cardiol., 4 (4) (2015), pp. 735-740

9. L. Verma, S. Srivastava, P.C. Negi**A hybrid data mining model to predict coronary artery disease cases using non-invasive clinical data** J Med Syst, 40 (7) (2016), pp. 1-7

10. Yanwei Xing, Jie Wang, Zhihong Zhao Yonghong Gao**Combination data mining methods with new medical data to predicting outcome of Coronary Heart Disease** Convergence Information Technology (2007), pp. 868-872

11. HeonGyu Lee, Ki Yong Noh, Keun Ho Ryu**Mining biosignal data: coronary artery disease diagnosis using linear and nonlinear features of HRV**LNAI 4819: emerging technologies in knowledge discovery and data mining (May 2007), pp. 56-66

12. Xiao Liu, Xiaoli Wang, Qiang Su, Mo Zhang, Yanhong Zhu, Qiugen Wang, Qian Wang**A hybrid classification system for heart disease diagnosis based on the RFRS method** Comput. Math. Methods Med., 2017 (2017), pp. 1-11

Research Gap

Machine learning is actually the one that provides system the ability to automatically learn and improves from experiences without being explicitly programmed . One of the applications of this technique is in predicting a dependent variable from the values of independent variables. The healthcare field is an application area of data mining since it has vast data resources that are difficult to be handled manually. Heart disease has been identified as one of the largest causes of death even in developed countries. One of the reasons for fatality due to heart disease is due to the fact that the risks are either not identified, or they are identified only at a later stage. However, machine learning techniques can be useful for overcoming this problem and to predict risk at an early stage .Thus, we can improve the prediction with various classification algorithms of machine learnings. Actually there are differences in accuracy with each classification algorithms. So there is need to know each algorithms prediction accuracy for the heart disease so that it can be predicted with higher accuracy.

Finalized Objective

The existing research has used ensemble methods to predict the heart disease. But, there is a need of comparative analysis of classification techniques in order to predict which of the classification algorithm provides more accuracy in predicting the one of the prominent disease which is heart disease. Thus, the finalized objective of this research is to study on comparative analysis for the accuracy in predicting this prominent disease where there is need of comparision of result of the various classification algorithm in predicting the accuracy.