LITERATURE SURVEY

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| SNO | TITLE OF THE PAPER | NAME OF  THE JOURNAL | AUTHOR | YEAR  OF  PUBLISHING | ACHIEVEMENTS | FUTURE WORK |
| 1. | Heart Disease Prediction using Machine Learning | IEEE | Chaimaa Boukhatem,  Heba Yahia Youssef,  Ali Bou Nassif. | 2022 | This paper refers to any critical condition that impacts the heart. Because heart diseases can be life-threatening, researchers are focusing on designing smart systems.This work presents several machine learning approaches for predicting heart diseases, using data of major health factors from patients. The paper demonstrated four classification methods: Multilayer Perceptron (MLP), Support Vector Machine (SVM), Random Forest (RF), and Naïve Bayes (NB), to build the prediction models. | Common diseases result from the combined effects of multiple genes and environmental factors. This complexity makes it very difficult to predict whether or not an individual will inherit disease. |
| 2. | Heart Disease Prediction using Machine Learning and Data Analytics Approach | Research  Gate | M.Marimuthu,  M.Abinaya,  K.S.Hariesh,  K.Madhankumar,  V.Pavithra | 2018 | Some of the data mining and machine learning techniques are used to predict the heart disease, such as Artificial Neural Network (ANN), Decision tree, Fuzzy Logic, K-Nearest Neighbour(KNN), Naïve Bayes and Support Vector Machine (SVM). This paper provides an insight of the existing algorithm and it gives an overall summary of the existing work. | There are many possible improvements that could be explored to improve the scalability and accuracy of this prediction system. Due to time limitation, the following research / work need to be performed for the future |
| 3 | Prediction Techniques of Heart Disease using Machine Learning | IJERT | Mangesh Limbitote , Dnyaneshwari Mahajan ,  Kedar Damkondwar , Pushkar Patil | 2020 | This data is analysed on regular basis. In this review, an overview of the heart disease and its current procedures is firstly introduced. Furthermore, an in-depth analysis of the most relevant machine learning techniques available on the literature for heart disease prediction is briefly elaborated. We are working on the algorithm with best accuracy. This will help the doctors to assist the heart problem easily. | A computerized system alone does not ensure accuracy, and the warehouse data is only as good as the data entry that created it.  The system is not fully automated, it needs data from user for full diagnosis. |
| 4 | Heart Disease Prediction using Strength Scores with Significant Predictors | NCBI | Armin Yazdani, Kasturi Dewi Varathan,  Wan Azman Wan Ahmad | 2021 | This paper is motivated by the gap in the literature, thus proposes an algorithm that measures the strength of the significant features that contribute to heart disease prediction. The study is aimed at predicting heart disease based on the scores of significant features using Weighted Associative Rule Mining. | Future researches may look into predicting the risk levels of heart disease, as this will help medical practitioners and patients to gauge their heart disease severity. The algorithm used in this study for measuring weight can be further explored for use with other datasets to cater to other prediction models using the weighted approach. |
| 5 | Heart Disease Prediction  Based on Data Mining Algorithms | IJRTI | Apruv Patel,  kunjan D. khatri,  Smit Kiri,  Kathan Patel | 2018 | Handling large data in the old way can  affect the results. Advanced data mining techniques are especially used in heart disease prediction to find facts about  databases and medical research. | In this paper, a single or hybrid combination of data mining algorithms can be used to investigate several papers used in cardiac disease prediction to identify algorithms for future research with high accuracy. |
| 6 | Heart Disease Diagnosis and Prediction Using  Machine Learning and Data Mining Techniques | Research  India  Publications | Animesh Hazra, Subrata Kumar Mandal,  Amit Gupta,  Arkomita Mukherjee,  Asmita Mukherjee | 2017 | The aim of this paper is to  summarize some of the current research on predicting heart diseases using  data mining techniques, analyse the various combinations of mining algorithms used and conclude which techniques are effective and efficient. Also, some future directions on prediction systems have been addressed. | In future an intelligent system may be developed that can lead to selection of proper  Treatment methods for a patient diagnosed with heart disease. Data mining can be of very good help in deciding the line of treatment to be followed by extracting knowledge from such suitable databases. |
| 7 | An artificial intelligence model for heart disease detection using machine learning algorithms | Science  Direct | 2022 | VictorChang,  Vallabhanent RupaBhavani,  Ariel QianwenXu,  MAHossain | In this paper, a python-based application is developed for healthcare research as it is more reliable and helps track and establish different types of health monitoring applications. We present data processing that entails working with categorical variables and conversion of categorical columns. We describe the main phases of application developments: collecting databases, performing logistic regression, and evaluating the dataset’s attributes. | Along with that, a model regarding ML has played a significant role in creating accuracy and determining results with the aid of training data. The emphasis for discussion is on data analysis. It works with categorical variables along with that; it will break particular categorical columns into dummy columns with 1s and 0s. |