**LITERATURE SURVEY DETAILS**

**1) Heart Disease Prediction using Exploratory Data Analysis(2020)**

**- R. Indrakumaria , T. Poongodib , Soumya Ranjan Jenac**

The analysis is carried out using a publicly available data for heart disease. The dataset holds 209 records with 8 attributes such as age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate and four types of chest pain. The dataset is analysed with visualization tool tableau and K means clustering. The result of the data analysis to identify the necessary hidden patterns for predicting heart diseases are presented in this section. Here the variables considered to predict the heart disease are age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate and four types of chest pain and exercise angina. The heart disease dataset is effectively pre-processed by eliminating unrelated records and given values to missing tuples. The pre-processed heart disease data set is then composed by K-means algorithm.

**2)Heart Disease Prediction using Machine Learning Algorithms(2022)**

**- Devara Sandhya1, Dr. Kamalraj**

Section depicts the overview of the existing system and illustrates all of the components, techniques and tools are used for developing the entire system. To develop an intelligent and user friendly heart disease prediction system, an efficient software tool is needed in order to train huge datasets and compare multiple machine learning algorithms. After choosing the robust algorithm with best accuracy and performance measures, it will be implemented on the development of the smart phone-based application for detecting and predicting heart disease risk level. Hardware components like Arduino/Raspberry Pi, different biomedical sensors, display monitor, buzzer etc. are needed to build the continuous patient monitoring system.

**3) Heart disease prediction using machine learning algorithms(2021)**

**- Harshit Jindal, Sarthak Agrawal, Rishabh Khera, Rachna Jain and Preeti Nagrath**

The proposed methodology in this system includes steps, where first step is referred as the collection of the data than in second stage it extracts significant values than the 3rd is the preprocessing stage where we explore the data. The algorithms that are used in this system are K nearest neighbors (KNN), Logistic Regression and Random Forest Classifiers which can be helpful for practitioners or medical analysts for accurately diagnose Heart Disease. Finally, the proposed model is undertaken, where we evaluated our model on the basis of accuracy and performance using various performance metrics.

**4. Heart Desease Prediction System(2019)**

* **Kennedy Ngure Ngare**

This system is implementing a effective heart attack prediction system using Naïve Bayes algorithm. We can give the input as in CSV file or manual entry to the system. After taking input the algorithms apply on that input that is Naïve Bayes. After accessing data set the operation is performed and effective heart attack level is produced. The proposed system will add some more parameters significant to heart attack with their weight, age and the priority levels are by consulting expertise doctors and the medical experts. The heart attack prediction system designed to help the identify different risk levels of heart attack like normal, low or high and also giving the prescription details with related to the predicted result.

**Tabulation of survey:**

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| --- | --- | --- | --- | --- | --- |
| **Year** | **Author** | **Title** | **Primacy** | **Methodology** | **Result** |
| 2019 | Kennedy Ngure Ngare | Heart Disease Prediction System | The heart attack prediction system designed to help the identify different risk levels of heart attack like normal, low or high and also giving the prescription details with related to the predicted result. | Naive Bayes algorithm | It provides the accurate results and consumes very less to time process the data. |
| 2020 | R. Indrakumaria , T. Poongodib , Soumya Ranjan Jenac | Heart Disease Prediction using Exploratory Data Analysis | The data analysis to identify the necessary hidden patterns for predicting heart diseases | It is analyzed with visualization tool tableau and K means clustering | The pre-processed heart disease data set is then composed by K-means algorithm. |
| 2021 | Harshit Jindal, Sarthak Agrawal, Rishabh Khera, Rachna Jain and Preeti Nagrath | Heart disease prediction using machine learning algorithms | It is helpful for practitioners or medical analysts for accurately diagnose Heart Disease | K nearest neighbors (KNN), Logistic Regression and Random Forest Classifiers | Evaluated on basis of accuracy and performance using various performance metrics. |
| 2022 | Devara Sandhya1, Dr. Kamalraj | Heart Disease Prediction using Machine Learning Algorithms | It is used to develop an intelligent and user friendly heart disease prediction system. | An efficient software tool is needed in order to train huge datasets and compare multiple machine learning algorithms | Smart phone-based application for detecting and predicting heart disease risk level. |