Visualizing and Predicting Heart Diseases with an Interactive Dash Board

Introduction:

Healthcare industries generate enormous amount of data, so called big data that accommodates hidden knowledge or pattern for decision making. The huge volume ofdata is used to make decision which is more accurate than intuition. Exploratory Data Analysis (EDA) detects mistakes, finds appropriate data, checks assumptions and determines the correlation among the explanatory variables. In the context, EDA is considered as analysing data that excludes inferences and statistical modelling.

Analytics is an essential technique for any profession as it forecast the future and hidden pattern. Data analytics is considered as a cost effective technology in the recentpast and it plays an essential role in healthcare which includes new research findings, emergency situations and outbreaks of disease. The use of analytics in healthcare improves care by facilitating preventive care and EDA is a vital step while analysing data.

Literature survey

S. No	Paper title	Authors	Month/ year	Implementation Techniques
1	Heart Disease Prediction using Exploratory Data Analysis	R.Indrakumari , T.Poongodi, Soumya ,Ranj an Jena	September 2017	➢ 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. ➢ To predict the heart disease, K-means clustering algorithm is used alongwith data analytics and visualization tool. ➢ The paper the pre-processing methods, classifier performances and evaluation metrics.
2	Prediction of heart disease at early stage using data mining and big data analytics: A survey	N. K. Salma Banu, Suma Swamy	2016	➢ Several studies have been carried out for developing prediction model using individual technique and also by combining two or more techniques. ➢ This paper provides a quickand easy review

| | | | | and understanding of available prediction models using data mining from 2004 to 2016. |
| | | | | ➢ The comparison shows the accuracy level of each model given by different researchers. |