Visualizing And Predicting Heart Diseases With An Interactive Dash Board

1. A real-time system for predicting heart disease based on Apache Spark, which is a powerful large-scale distributed computing platform that can be used to successfully handle streaming data events versus machine learning using in-memory calculations. The system is made up of two basic components such as data storage and visualization and streaming processing. The first predicts cardiac disease by applying a classification model to data events using Spark MLlib and Spark streaming. The huge volume of created data is stored by the seconds using Apache Cassandra.

2. Big data analytics has the capability to assist in predicting heart problems and provide patients with the right medications and care. The inferred information can be used in the healthcare sector to predict heart problems in their early stages. User-generated content, mobile transactions, internet clicks, social media, and other sources generate big data. Furthermore, improvements in the use of big data help with telemedicine, patient registries, EHR processing, exchanging clinical data, and more. The data is visualize using Tableau Software and the K-means clustering technique. Age, gender, weight, chest discomfort, resting blood pressure, resting electrocardiogram, cholesterol, and other factors are among the diagnostic clinical indicators for heart disease prediction.

3. Today, Internet of Things is crucial to the fight against heart disease. Patients have a lot of access to medical resources. The main goal of this idea is to develop a framework for predicting heart disease based on key risk indicators and a variety of classifier configurations, including K-nearest neighbors, Naive Bayes, support vector machines, Lasso, and ridge regression methods. Principal component analysis and linear discriminant analysis were also performed in addition to these data classifications. The performance of the suggested research project is assessed using sensitivity, accuracy, and precision.