ABSTRACT

Real-time Healthcare Analytics

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Health prediction analysis using big data is a rapidly growing field that uses large amounts of data to predict and prevent potential health issues. This analysis can identify patterns and trends in health data, which can help to detect diseases early and develop preventative measures. Machine learning and data mining are used to analyze the data and make predictions.

One of the key benefits of using big data in health prediction analysis is that it can identify patterns and trends that may not be visible with traditional methods. For example, data from electronic health records, social media, and other sources can be analyzed to identify specific disease risk factors and develop targeted prevention strategies. Additionally, the use of machine learning and data mining techniques allows for the analysis of enormous amounts of data, which can improve the accuracy of predictions and allow for the development of personalized treatment plans.

We are aware that the entire healthcare system is built on assumptions, which must first be put to the test and proven by several tests before patients can have confidence in their doctors' expertise. To use the system's analysis to predict a person's health, we developed a system that uses data mining techniques to predict a person's health based on the results of numerous medical tests. We used the Statlog (Heart) Data Set from the UCI Machine Learning Repository to train the system. This data set contains parameters such as age, sex, type of chest discomfort, cholesterol, sugar, and results. We only need to pass a few generic inputs to make a prediction. The prediction results from all the algorithms are combined by calculating their mean value, which represents the actual result of the prediction process, which runs entirely in the background.

Health prediction analysis using big data is a promising field with the potential to improve the quality of healthcare. By identifying patterns and trends in health data, this analysis can help to detect diseases early and develop preventative measures. Additionally, the use of machine learning and data mining techniques can improve the accuracy of predictions and allow for the development of personalized treatment plans.