

# HEART DISEASE PREDICTION USING MACHINE LEARNING

## ABSTRACT

Machine learning disease prediction is a system that predicts diseases based on information provided by users using various suitable algorithms. In recent times, Heart Disease prediction is one of the most complicated tasks in the medical field. In the modern era, approximately one person dies per minute due to heart disease. Data science plays a crucial role in processing huge amount of data in the field of healthcare. As heart disease prediction is a complex task, there is a need to automate the prediction process to avoid risks associated with it and alert the patient well in advance.

This Heart Disease Prediction Using Machine Learning is completely done with the help of Machine Learning algorithms and Python Programming language with and also using the dataset that's available previously by the hospitals using that we'll predict the disease. This model is developed using classification algorithms, as they play important role in prediction. The proposed work predicts the chances of Heart Disease and classifies patient's risk levels by implementing different machine learning techniques such as Logistic Regression, Random Forest, Support vector machine, Gaussian Naïve Bayes, Gradient boosting, K-nearest neighbours, Multinomial Naïve bayes and Decision trees.

The main objective of this model is to get a better accuracy to detect the heart-disease using algorithms in which the target output counts that a person having heart disease or not. This in turn will help to provide effective treatment to patients and avoid severe consequences.

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