

## Cardiovascular Disease Prediction Using Machine Learning Approaches

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**Abstract :** It is estimated that heart disease accounts for one in ten deaths worldwide. United States deaths due to heart disease are among the leading causes of death according to the World Health Organization. Cardiovascular diseases (CVDs) account for one in four U.S. deaths, according to the Centers for Disease Control and Prevention (CDC). According to statistics, women are more likely than men to die from heart disease as a result of strokes. A 50% increase in men's mortality was reported by the World Health Organization in 2009. The consequences of cardiovascular disease are severe. The causes of heart disease include diabetes, high blood pressure, high cholesterol, abnormal pulse rates, etc. Machine learning (ML) can be used to make predictions and decisions in the healthcare industry. Thus, scientists have turned to modern technologies like Machine Learning and Data Mining to predict diseases. The disease prediction is based on four algorithms. Compared to other boosts, the Ada boost is much more accurate.

**Keywords :** heart disease, cardiovascular disease, coronary artery disease, feature selection, random forest, AdaBoost, SVM, decision tree

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