## Heart Ailment Prediction Using Machine Learning Methods

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**Abstract :** The heart is the coordinating centre of the major endocrine glandular structure of the body, which produces hormones that profoundly affect the operations of the body, and diagnosing cardiovascular disease is a difficult but critical task. By extracting knowledge and information about the disease from patient data, data mining is a more practical technique to help doctors detect disorders. We use a variety of machine learning methods here, including logistic regression and support vector classifiers (SVC), K-nearest neighbours Classifiers (KNN), Decision Tree Classifiers, Random Forest classifiers and Gradient Boosting classifiers. These algorithms are applied to patient data containing 13 different factors to build a system that predicts heart disease in less time with more accuracy.

**Keywords :** logistic regression, support vector classifier, k-nearest neighbour, decision tree, random forest and gradient boosting

**Conference Title :** ICMLC 2024 : International Conference on Machine Learning and Cybernetics **Conference Location :** Boston, United States **Conference Dates :** April 22-23, 2024