Heart Disease Prediction Project

Overview

This project aims to predict the likelihood of heart disease using machine learning techniques. The dataset contains various health-related parameters, and the model is trained to classify whether a patient is at risk of heart disease.

Features

Data preprocessing and exploratory data analysis (EDA)

Implementation of machine learning models

Model evaluation and performance metrics

Visualization of results

Dataset

The dataset used in this project contains features like age, cholesterol levels, blood pressure, and other key indicators related to heart disease.

Models Used

Logistic Regression

Decision Tree

Random Forest

Support Vector Machine (SVM)

K Nearest Neighbor (KNN)

Results

Logistic Regression achieved the highest accuracy of 89%, outperforming other models. The project evaluates different models and selects the best-performing one based on accuracy, precision, recall, and F1-score.