

Data Science Project Topics Using Machine Learning

Beginner Level

- House Price Prediction - Predict housing prices using regression algorithms.
- Iris Flower Classification - Classify iris flowers based on sepal/petal length and width.
- Titanic Survival Prediction - Predict which passengers survived the Titanic disaster.
- Student Performance Prediction - Predict exam scores or pass/fail based on study hours, attendance, etc.
- Loan Approval Prediction - Predict loan approval status using applicant data.

Intermediate Level

- Credit Card Fraud Detection - Use anomaly detection or classification to spot fraudulent transactions.
- Fake News Detection - Use NLP to classify news articles as fake or real.
- Customer Churn Prediction - Predict whether a customer is likely to leave a company.
- Heart Disease Prediction - Predict the likelihood of heart disease using health metrics.
- Movie Recommendation System - Use collaborative or content-based filtering to suggest movies.

Advanced Level

- Stock Price Prediction - Use time series forecasting models (ARIMA, LSTM) to predict future stock prices.
- Sentiment Analysis on Social Media - Analyze tweets or reviews to classify sentiment (positive/negative/neutral).
- Image Classification (e.g., Pneumonia Detection) - Use CNNs for medical or general image classification tasks.
- Traffic Flow Prediction - Predict traffic congestion using historical data and weather.
- Energy Consumption Forecasting - Predict electricity usage for households or industries.