## **Masterclass**

### **Industry Projects**



#### **Prediction of Loan interest rates**

This project of the Data Science course is widely used in the Banking sector. To develop the credit scorecard using a regression model, where the past data of the existing loans & default cases can be used to enable the investor to predict the probability of default for a potential loan to be given to the new loan applications from the borrowers and based on the risk categorization/risk bucketing suggest suitable interest rates to be charged to hedge the risk involved.



# Deep dive into exploratory analysis and predictive modeling in the financial domain

The objective is to analyze P2P Lending loan transaction data from one of the major US market

players for over a decade and build a model for identification and recommendation of borrowers/loans for an investor.

Overall, you will have the effort in these themes

- Predict the interest rate of potential lenders
- Predict the probability of default for a potential loan



# Marketing analytics, predictive modeling on website visitor conversion rates

This project in this Data Science course is most commonly used in the fintech industry.

People often make online payments, but the success rate of transactions is still low. Determine the likelihood of payment on the given features in the dataset. The dataset consists of feature vectors belonging to many online sessions. The purpose of this project is to identify user behavior patterns to effectively understand the features that influence the payment journey

## **Masterclass**



#### **Creditworthiness of Customers**

Learn how predictive analytics can be used to decide the creditworthiness of customers and whether they are issued a credit card or not.

Learn to apply Logistic Regression, SVM, Tree Models, and other classification techniques.

### **Case Studies**



#### **Applying Deep Learning for Face Anti-Spoofing**

Challenge: Efficient face anti-spoofing model

Solution: A deep learning-based model to respond to

image/video fraud attempts

**Technologies and tools:** Python, deep learning, face recognition, computer vision, keypoint detection, MTCNN,

**TensorFlow** 



## Building Predictive Models to Improve Debt

#### **Collection Process**

**Challenge:** Improve debt collection effectiveness with the

help of predictive analytics

**Solution:** A machine learning model for predicting the

probability of promise to pay

Technologies and tools: Python data analysis ecosystem, VPN

Checkpoint, SQL Server, Lightgbm package