

ODSC WEST
QuantUniversity Presents:
DATA SCIENCE FOR FINANCE BOOTCAMP

Time: 9.00-1.00

Instructor: Sri Krishnamurthy

Summary:

The goal of this course is to offer data science and fintech enthusiasts a hand-on practical case study to understand the power of Data Science in Finance. We will be using the Lending club data set to build a credit risk model using machine learning techniques. Python experience is not required to attend the course but useful. We will illustrate how to build applications using Python packages such as scikit-learn, Keras etc. Techniques such as K-means, t-sne, Regression, Random Forest and Neural Networks would be covered.

Participants who complete all 4 Modules and complete the post-workshop survey will be awarded a QuantUniversity's Data science for Finance mini-certificate

Agenda:

Module 1:

- Data Science in Finance
- Orientation on the Credit risk case study

Lab 1:

- Exploring Data sets to make sense in Python

Module 2:

- Machine Learning in 30 minutes!

Lab 2:

- Credit risk case study
- Building your first ML model using K-means, t-sne, Regression, Random Forest and Neural Networks

Module 3:

- Evaluating models and performance metrics

Lab 3:

- Credit risk case study
- Understanding and tuning your model

Module 2:

- Deployment and Prediction

Lab 4:

- Credit risk case study
- Deploying your model and predicting interest rates

NOTES:

1. All contents will be in Python. A Python tutorial will be posted prior to course
2. Please plan to attend all sessions. We will plan to stream this class live and also record it.
3. No software installations required. Bring a working laptop with a browser
4. We will offer prizes to the best submissions
5. To be eligible for the certificate, you must complete all 4 labs and fill out a post completion survey

Pre-class Reading:

1. [Speaking Data Science with an investment accent - CFA Magazine, Cynthia Harrington](#)
2. [Machine Learning, an intuitive foundation, Sri Krishnamurthy](#)
3. [Kaggle Lending Club challenge](#)