Abdollah Rida

Graduate Student at UC Berkeley (Fintech)

Education

2019 – 2020 **MEng in IEOR (Fintech concentration)**, *University of California, Berkeley*. Machine/Deep Learning for Financial Engineering - Operations Research - Data Science

2016 – 2019 Polytechnician Engineer Program, École polytechnique, BS/MSc.

Stochastic Calculus - Operations Research - Machine/Deep Learning - Statistics - Game Theory

Additional education through seminars in: Architecture, Private and Administrative Law, Public Finances, Market Research, Company and Injury Assessment.

Experience

April 2019 Quantitative Researcher, BNP Paribas, New York City, USA.

August 2019 Quantitative Researcher/Data Scientist within the CIB RISK Independent Review and Control team:

- Built a challenger model for a Bank of the West Auto loan scorecard using Machine learning.
- Studied a challenger model for a Large Corporate Scoring/Probability of Default portfolio using advanced Manifold/Machine Learning techniques.
- Usage of cutting-edge model explanation techniques to improve model interpretability and promote the usage of Machine/Deep Learning for credit scoring.
- Review of the BNP Paribas' standards for model documentation and validation to adapt them for AI models.

June 2018 Assistant Model Risk Manager, BNP Paribas, Paris, France.

- Sept. 2018 Member of the RISK Independent Review and Control team (RISK IRC) tasked with studying new and innovative credit risk modeling solutions.
 - Independent review of several used models. Model challenging using cutting-edge mathematical techniques.
 - Study of several state-of-the-art methods and implementation within the BNP-Paribas framework.
 - Study of a complete Machine Learning approach for credit scoring and probability of default prediction within BASEL II.

Skills

- Computer Skills: Programming and scripting in Python (pandas, scikit-learn, pytorch, tensorflow, keras, etc...) & R. Typesetting in LATEX
- Statistical/Stochastic modeling: Time-series (ARMA, ARIMA, GARCH), Bayesian inference, Markov chains, point
 processes, stochastic calculus, and financial modeling. Past projects include time-series analysis of stock prices and
 research on market impact and trades high-frequency dynamics using Hawkes' processes.
- Machine/Deep Learning: Model building and data analysis using several cutting-edge algorithms (XGBoost, Convolutional Neural Nets, GANs, t-SNE, SHAP, etc...). Past projects include research on a regulation compliant machine learning credit scoring model, image recognition on medical data, and studies on solving stochastic/partial differential equations using neural networks.

Awards & Activities

Oct 2019 Ecole Polytechnique, Research Internship Award.

Given for my work at BNP Paribas' New York Offices. Awarded to the Master Research Thesis with the most positive and helpful impact for companies.

Oct 2018 BNP Paribas, RISK IRC Seminar.

Speaker. Led a 30 minutes presentation about Machine Learning for Credit Scoring and Probability of Default curve calibration. Presented my work in front of 70+ RISK experts from all over the world.

Jun 2018 Oliver Wyman, Start Here 2018.

Start Here 2018 finalist. Completed a business case study with three other teammates and presented our work in front of Managing Partners from Europe and USA in OW's New York City offices.