# Jingyi (Joy) LI

PKU Street Yanyuan, Haidian District, Beijing, China, 100871 | (86) 180-1971-1040 | jl3308@princeton.edu

# **EDUCATION**

Princeton University Princeton, NJ

Master in Finance

Expected May 2023

• Anticipated Coursework: Machine Learning, Statistical Analysis of Financial Data, Computational Finance in C++, Statistical Theory and Methods, Financial Econometrics, Asset Pricing

**Peking University** 

Beijing, China

Bachelor's in Finance, School of Economics

Sept. 2017-July 2021

- Cumulative GPA: 3.81/4.00 | Ranking: 5/152
- Awards: 2018 Leo KoGuan Scholarship (Top 5%), The Merit Student of PKU (Top 5%)
- Coursework: Econometrics, Financial Accounting, Fixed-Income Securities, Financial Economics, Stochastic Analysis, Data Analysis, Data Structure and Algorithm, Time Series Analysis, Numerical Methods, Python, Machine Learning (Coursera), Deep Learning (Coursera)

#### University of California, Los Angeles

Los Angeles, CA, US

Exchange Student, Economics, Dean's List

Sept. 2019-Dec. 2019

• Coursework: C++ Programming, Stochastic Process, Ordinary Differential Equation (A+), Mathematics Finance

# **EXPERIENCE**

Probquant Shanghai, China

Intern, HFT Quantitative Research

Jan. 2021-June 2021

- Built and maintained intraday and cross-day alpha library using tick-level stock depth data, trade data, and order data
- Conducted research about parameter influence on backtesting stability and validity, concluded and unified backtesting parameters
- Backtested and refined reversal factors by comparing different industry classification methods, including KNN
- Improved factor performance by alpha filtering using accessory factors and factor cutting using trade, volatility, time information
- Trained rolling linear and XGB Models on a one-year minute level dataset of 1500 stocks to generate prediction signals of different periods. Combined signals and achieved an average excess return rate of 0.16% in each daily trade on China's A-share market
- Applied feature selection on 258 features by weight, gain and cover on a rolling basis to reduce overfitting

# Goldman Sachs (Singapore) PTE LTD

Singapore

Commodity Strats (Quant) Summer Analyst, Global Markets

July 2020-Aug. 2020

- Desk Strats: Performed backtests on delta-neutral hedging strategies on DCE and offshore iron ore market, examined Gabillon model in offshore iron ore market by comparing realized vol and implied vol surfaces, researched the differences between DCE margining and equity/futures style margining
- Sales Strats: Conducted market research about the SGP power market, examined correlations between tradable commodity prices and USEP, listed potential clients, and proposed hedging strategies
- Datathon: Discovered overdraft patterns in accounts' cash flow data using std of amount or a significant drop in amount value

### **Shanghai iFund Asset Management Company**

Shanghai, China

Summer Intern, Quantitative Research

June 2019-Sept. 2019

- Developed alpha strategies on China's A-share market using theories and models from mathematics, economics, and physics, including cross-price elasticity, Fourier transform, and Adaptive Expectations Model
- Employed factor rotation and dynamic factor timing methods to improve performance

## RESEARCH

## **Stochastic Foreign Exchange Factor Modelling**

Beijing, China

Advisor: Chenxu Li, Associate Prof. of Guanghua School of Management, Peking University

July 2020- Nov. 2020

- Derived closed-form formula for foreign exchange options of 3/4 factor models using affine structure and change of Numeraire
- Calibrated Heston, CEV, Jump, and 3/4 factor models using Bloomberg data, plotted model fitness and local minimum using MATLAB
- Conducted empirical tests on correlations between short-term yields, 5 countries' exchange rates and their realized vol using Python
- Presented results to China Bond Pricing Center

## **ACTIVITIES**

# **National Mathematical Modeling Competition for College Students**

Beijing, China

Placed Second Nationally, Higher Education Press, Group Leader

Oct. 2019

• Led team members to complete thesis on Pressure Control of High-Pressure Oil Pipe using methods of numerical simulation

## 2018 International Monetary Forum

Beijing, China Sept. 2019

Guest Speaker, School of Government Finance Renmin University

• Spoke on pros and cons of Sino-US trade war to an audience of alums from Harvard, Yale and other schools

#### SKILLS AND INTERESTS

- Languages: Mandarin (native), Shanghainese (basic)
- Technical Skills: C++, Python, MATLAB, Stata; Wind, Bloomberg, Mathematica, Office, LaTeX, SPSS; CFA level I Candidate
- Interests: Texas Hold'em Poker, Traveling, Photography, Badminton, Electric Piano (15 years)