

ZIRUI (PETER) WEI

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EDUCATION

The University of California, Berkeley

Master of Financial Engineering

Berkeley, US

Expected March 2020

Wuhan University

Bachelor of Art in Economics, Minor in Statistics

GPA: 3.75/4.0, Second Class Scholarship

Wuhan, China

Sept. 2014 – Jun. 2018

SKILLS

Programming: Python, Git, kdb+, C++, MATLAB, SQL, Linux, R, VBA, LaTeX, Slang

Math & Stat: Machine Learning, NLP, Time-Series Analysis, Stochastic Calculus, ODE/PDE, Optimization

Finance: Dynamic Asset Allocation, High Frequency Trading, Fixed Income, Advanced Derivative Pricing, CFA Level 2 Candidate

Interests: Fitness, Guitar, Singing, Swimming, Classic Literature, Investment, Travelling

PROFESSIONAL EXPERIENCE

Goldman Sachs

Strat Intern

Salt Lake City, US

Oct. 2019 – Jan. 2020

- Developed and automated tools for forecasting liquidity indicators for each desk in Slang (improved accuracy by over 20%)
- Implemented regime switching model in Python to assess the state of capital usage and facilitated business understanding of results
- Optimized funding usage by linear programming in Python to minimize borrowing cost while satisfying liquidity requirements

Ricequant

Cross Desk Strategist Intern

Shenzhen, China

Sept. 2018 – Mar. 2019

- Built and tested GRU, Random Forest, SVM, and Logistic Regression models in Python with technical indicators as inputs to predict the direction of prices (achieved F1 score over 0.7 on many stocks with Random Forest model)
- Built risk attribution and performance evaluation systems in Python for one of the biggest commercial banks in China
- Improved robustness and added new features for a popular opensource backtesting system -- [RQAlpha](#) in Python, and updated its API document; trouble-shot for clients and built pipeline for evaluating trading performance
- Built and maintained tools by Python and Linux for update and Alpha research on sentiment and retailer data
- Customized and demonstrated backtesting systems in MATLAB to a university and a mutual fund, leading to sales of the systems

Industrial Securities

Quantitative Research Intern

Shanghai, China

Jan. 2018 – Apr. 2018

- Built stock recommendation system in Python based on residual income valuation model
- Implemented SVM model in Python to predict the direction of stock index movement using derivative trading data (out-of-sample accuracy of 62%); published daily report based on the output of the model

Aegon-Industrial Fund Management

Financial Engineering Intern

Shanghai, China

Jul. 2017 – Oct. 2017

- Designed a smart beta strategy in R by combining Momentum & Volume Reversal strategy with the Log Periodic Power Law (LPPL) model (information ratio of 0.58 in 5-years backtesting)
- Priced exchangeable bonds in R using control variates method
- Identified options and securities with lowest prices that meet risk management and socially responsible criteria, and calculated the premium of index-tracking funds in VBA

COMPETITIONS

Yintech Trading Competition

May. 2018 – Oct. 2018

- Implemented and improved term structure strategy in Python for China's future market
- Realized 2.4 Sharpe ratio and 4.33% net return in the final round of real trading, ranked 4th among 682 teams (51 trading days, 3.3 times the minimum margin rate, 500,000 CNY capital)

Citi Innovative Financial Application Contest

Apr. 2017 – Nov. 2017

- Researched on and implemented cross-hedge; invented a new hedging method: forecast price distribution using LSTM and then optimize combination of derivatives to strike a balance between residual risk and hedging cost
- Led a team of 14 students and developed an online platform enabling people to use the above methods (ranked 2nd among 190 teams)