

# Ziyue Rachel Zhang

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## EDUCATION

### Princeton University

Princeton, NJ

*Master in Finance Candidate, Bendheim Center for Finance*

Aug 2020 – Jun 2022 (Expected)

- **Coursework:** Asset Pricing, Statistical Analysis of Financial Data, Computational Finance in C++, Financial Risk Management

### The Hong Kong University of Science and Technology

Hong Kong

*BSc in Quantitative Finance, Computer Science (Second Major), Mathematics (Third Major)*

Sep 2016 – Jun 2020

- **CGA:** 4.148 / 4.3 (top 1%)
- **Honors:** Academic Achievement Medal (top 1%); HKSAR Government Scholarship and sever others; Beta Gamma Sigma
- **Coursework:** Micro & Macroeconomics, Time Series Econometrics, Financial Markets Trading and Structure, Object-Oriented Programming and Data Structures, Stochastic Calculus, Differential Equations

### Wharton School, University of Pennsylvania

Philadelphia, PA

*International Student Exchange Program*

Aug 2018 – Dec 2018

- **CGA:** 4.0 / 4.0
- **Coursework:** Fixed Income Securities, Financial Derivatives, Data Analytics and Statistical Computing, Psychology

## WORK EXPERIENCE

### Hanrong Investment

Shenzhen, China

*Quantitative Research Intern*

June 2020 – Aug 2020

- Researched and formulated CTA trading strategies based on high frequency data, conducted back-testing with parameter sensitivity analysis and performance evaluation, proposed three CTA strategies with Sharpe Ratio over 2
- Improved an existing strategy by refining its signal with two more filters, enhanced its Sharpe Ratio and MAR Ratio
- Constructed and maintained dollar bar, volume bar and imbalance bar data of 30 commodity futures based on their tick market data

### Coordinates Capital Management Limited

Hong Kong

*Part-time Quantitative Analyst Intern*

Aug 2019 – Jan 2020

- Conducted PCA analysis on US treasuries and US swaps over 34 months using R; studied risk hedging strategies across different tenors using the first component
- Constructed an automatic monthly delta risk attribution system for bonds, futures, swaps and options in 13 currencies to facilitate risk control for trades on basis spreads
- Analyzed statistical initial margin calculation models, performed attribution analysis for the fund's initial margin across different brokers, currencies and products; identified fallacious charges which saved approximately 10% of the fund's initial margin
- Built automatic visualization tools for treasury bonds to visualize and analyze rolling of bond futures

### China Renaissance Securities (Hong Kong) Limited

Hong Kong

*Investment Banking Division Summer Analyst*

Jun 2019 – Jul 2019

- Engaged in preparation of management presentations by identifying and highlighting the core competitive moats and investment value for an IPO transaction and three US\$ 100 million private placements
- Provided suggestions for target companies' equity stories and valuation by analyzing successful comparable firms
- Participated in writing and organizing answers to address questions from investors by analyzing internal data pack and attending management team interviews in a US\$ 450 million private placement and a US\$ 300 million convertible bond offering
- Constructed financial models for a dominating tea retailer through analyzing its operating data, breaking down revenues and expenses by identifying key drivers and projecting future growth

### MCM Partners

Hong Kong

*Quantitative Strategist Part-time Intern*

Apr 2019 – May 2019

- Researched academic papers and implemented relevant models with modifications in python, developed liquidity and momentum combined long-short strategies; back-tested the strategies using stocks in S&P 500 for fifteen years on four different look back windows with monthly rebalanced positions

## RESEARCH EXPERIENCE

### Wharton School, University of Pennsylvania

Sep 2018 – May 2019

*Research Assistant for Competition, Profitability, and Risk Premia; Endogenous Competition and Financial Distress*

- Independently studied 15+ academic papers on 8 distress measuring models; quantified companies' financial distress scores in R
- Cleaned fuzzy corporate bond data over 41 years using R; consolidated 2 databases of different corporation characteristics

## EXTRA-CURRICULAR ACTIVITIES

**Wharton Investment & Trading Group, Member**

Sep 2018 – Dec 2018

**Crossroads Foundation, Volunteer**

Spring 2017

**Film Society, HKUST SU, Subcommittee Member**

Sep 2016 – Dec 2016

## SKILLS & INTERESTS

**Technical Skills:** Python, R, C++, VBA, Bloomberg, Capital IQ, Thomson ONE, Wind

**Language:** Mandarin (Native)

**Interests:** Folk Dance, Jogging, Piano (Level 10 certificated by Chinese Musicians' Association, highest)