Yufan Zhang

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EDUCATION

UNIVERSITY OF ROCHESTER — **Rochester, NY**
PhD in Finance — **Expected Jun 2028**

- Courses: Modern Value Theory, Theory of Finance, Econometrics, Agency Theory, Empirical Corporate Finance

THE UNIVERSITY OF CHICAGO — **Chicago, IL**
Master of Science in Financial Mathematics (GPA: 3.82/4.0) — **Dec 2022**

- Courses: Portfolio Theory & Risk Management, Option Pricing, Computing for Finance in C++, Numerical Methods, Asset Pricing, Stochastic Calculus, Multivariate Statistical Analysis

XI'AN JIAOTONG UNIVERSITY — **Xi'an, China**
Bachelor of Science in Statistics — **Jul 2020**

- Courses: Mathematical Statistics, Ordinary Differential Equations, Matrix Analysis, Data Analysis and Statistical Software, Machine Learning, Bayesian Statistics, Statistical Learning, Stochastic Processes, Probability

SKILLS

Computing: Python, C++, MATLAB, Jupyter, R, C, MS Office
Knowledge: Machine Learning, Data Analytics, Portfolio Management, Natural Language Processing, Asset Pricing
Certification: C++ Programming for Financial Engineering with Distinction (Baruch College, 2020)

RESEARCH

INFLATION EXPECTATION FORMATION: EVIDENCE FROM FORECAST REVISIONS — **Aug 2022 – Jan 2023**
Advisor: Professor Ekaterina Smetanina, Booth School of Business, University of Chicago

- Create a Kalman filter that separates the inflation process to construct forecasts and compare them to the surveys
- Design the Dynamic Factor Models with EM-algorithm to estimate latent variables and forecast CPI

REPLICATION OF THE PROCESS FOR SIGNAL CREATION — **Jun 2022 – Apr 2023**
Advisor: Professor Dacheng Xiu, Booth School of Business, University of Chicago

- Maintain and update the Python code for the process of signal creation
- Build accounting signals in international stock markets

PREDICTING RETURNS WITH TEXT DATA — **Dec 2020 – Oct 2021**
Advisor: Professor Dacheng Xiu, Booth School of Business, University of Chicago

- Performed Monte Carlo Simulation to compare the performance of Supervised Sentiment Extraction Algorithm, Dictionary methods, Naïve Bayes and Multinomial Inverse Regression
- Implemented Natural Language Processing on finance text data to extract key words and phrases
- Collected sentiment-charged words with marginal screening statistics, determined sentiment weight for words using Topic Model, and scored new article using maximum likelihood estimation
- Built daily/monthly equal-weighted and value-weighted trading portfolios based on different methods, such as Supervised Sentiment Extraction Algorithm, Dictionary methods, RavenPack and Word Power method
- Investigated the speed of information assimilation and the influence of size and volatility on the sentiment model

MACHINE LEARNING IN ASSET PRICING — **Sep 2020 – Nov 2020**
Advisor: Professor Dacheng Xiu, Booth School of Business, University of Chicago

- Applied machine learning techniques like regression, random forest and neural network to empirical asset pricing
- Developed efficient and clean Python code according to existing MATLAB code
- Created standard, concise, and visual Jupyter notebooks

TEACHING EXPERIENCE

UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS — **Chicago, IL**
Teaching Assistant of 41100 Applied Regression Analysis (MBA) — **Jan 2022 – Mar 2022**

- Delivered a range of teaching and assessment activities including tutorials directed towards review of the lecture notes and give commentary on weekly assignments
- Provided effective, timely, and appropriate feedback to students to support their learning