Kexin (Kathy) Deng

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kd537@cornell.edu

EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Master of Engineering in Financial Engineering, GPA: 3.82

Expected December 2025

cell: 607.339.9696

New York University Shanghai, Shanghai, China

Bachelor of Science in Data Science, Double Major in Business and Finance, Cum Laude, GPA: 3.8

May 2024

Awards: University Honors Scholar & Founders Day Award, Global Quintessence Scholarship, Dean's List (2020-2023)

Selected Coursework: Investment & Portfolio Management, Market Microstructure and Trading, Optimization Modeling in Finance, Quantitative Methods in FE, Big Data Technologies, Simulation Modeling & Analysis, Derivatives, Machine Learning

SKILLS

Technical: Python, R, Excel, Machine Learning, EViews, Stata, SQL, HTML, CSS, Tableau, Wind, SAP, Time Series Analysis

EXPERIENCE

Quant Research Analyst Intern, Shanghai Luoshu Investment Co., Ltd., Shanghai, China

May to Aug. 2024

- Designed a 1.57 Sharpe trend-following momentum strategy in commodities futures universe over 2021-2024 based on Stanford's Hodrick-Prescott L1 Filter; improved via vectorization, execution optimization, & stop/loss risk management.
- Developed an interactive position visualization tool for alternative signal including metrics like position cost, cumulative P&L, market value across all brokers and instrument/contract universe, with data from brokers' top 20 trading billboard.
- Detected option investment arbitrage opportunities via spreads using high-frequency tick data of 300ETF option market.

Quant Development Intern, Shenwan Hongyuan Securities Co., Ltd., Shanghai, China

May to Aug. 2023

- Programmed company data collection for low & high-frequency research and trading in Python on 5 futures exchanges and 2 stock exchanges; increased the original company code speed by 10x through code structure, Numpy manipulation, etc.
- Developed after-backtest strategy performance evaluation module for the company's quant platform, by coding multi-day, multi-contract framework for daily, 500 millisecond high-freq intraday, and TWAP/VWAP algorithmic trading appraisals.

Digital Transformation Consultant Intern, IBM, Foshan, China

Jul. to Aug. 2022

- Participated in the Country Garden Holding's digital transformation with SAP (Enterprise Resource Planning software); manipulated account cross-reference table; built and tested organizational, functional, and composite roles across systems.
- Constructed operation manuals based on client needs and delivered budget organization slide decks to clients.

Quant Strategy Intern, Kaifeng Investment Management Co., Ltd, Shenzhen, China

May to Jul. 2022

- Modeled multi-factor CSI300 strategy, conducted single-factor tests, multicollinearity analysis & factor orthogonalization; tuned timing on Double DQN algorithm and achieved an annualized return of 15%.
- Participated in the research of factor zoo with DS-LASSO, compared models through literature review.

PROJECTS

Research Assistant: Mining & Pricing Data Asset, NYU Shanghai, Shanghai, China

Sep. 2023 to Jun. 2024

• Gathered annual report of all Chinese listed companies using Python Crawler; conducted categorization of data asset-related keywords for new factor generation. Computed all stocks' cumulative abnormal return with Fama-French three factor model.

Research Assistant: Alipay Mutual Fund Research, Alipay & NYU, New York, NY

Mar. 2023 to Aug. 2024

- Researched COVID-19's influence on Chinese mutual fund investors' consumption and investment responses.
- Built 10+ fixed-effects, difference-in-differences analyses, and triple interaction models to uncover key metric shifts, portfolio rebalancing, timing, and alpha risk concerning income disparities.

Modeling & Forecasting Volatility and Spillover Effect, Undergraduate Research Fund, Shanghai, China Jun. to Sep. 2022

• Researched disproportionate effect of the COVID-19 pandemic on major APEC financial markets stock indices; modeled volatility characteristics and spill-over effects, conducted forecast using 4 models from GARCH family series.

LEADERSHIP EXPERIENCE

Student Senator, Student Senator Council of NYU Student Government Assembly, New York, NY

Sep. to Dec. 2022

• Represented and advocated for students on university senate and student senate meetings; held town halls and led field trips.