Yuchen Yu

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Education

Princeton University — *Master in Finance (**GPA:** 3.92 / 4.00)* *Aug. 2024 - May 2026 — Princeton, NJ*

- **Courses:** Stochastic Calculus, Linear & non-linear optimization, Financial Risk Management, High Frequency Markets, Probabilistic Modeling, Statistical Analysis, Monte Carlo Simulation, Financial Econometrics, Asset Pricing, Behavioral Finance

Tsinghua University — *Double BS in Computer Science and Finance (**GPA:** 3.86 / 4.00)* *Sept. 2020 - Jun. 2024 — Beijing, China*

- **Honors:** Overall Excellence Scholarship, Outstanding Graduate
- **Courses:** Probability and Statistics, Data Structure, Machine Learning, Deep Learning, Calculus, Linear Algebra, Object-Oriented Programming, Micro & Macro Economics, Software Engineering, Ordinary Differential Equations, Block-Chain Technologies

University of California, Berkeley — *Global Access Exchange Program (**GPA:** 4.00 / 4.00)* *Aug. 2023 - Dec. 2023 — Berkeley, CA*

- **Courses:** Stochastic Process, Multivariate Statistics, Operating System and System Programming

Professional Experience

Cubist Systematic Strategies — *Quantitative Researcher* *Jun. 2026 - present — New York, NY*

- Work on topics related to MFT equities.

Millennium Management, LLC — *Quantitative Research Summer Intern* *Jun. 2025 - Aug. 2025 — New York, NY*

- Worked in equity volatility systematic team, engineered daily features from volatility surface and option price/volume data across both daily and intraday frequencies, features were created from economic intuition, and enriched by secondary transformations.
- Designed and implemented 2 models: a linear regression framework and an iterative selecting model with various hyperparameters to select features, then used a Sharpe-ratio based dynamic combining model to generate final trading signals on 3M-ATM options. Delivered 4 distinct signals with a combined net Sharpe ratio exceeding 2. The signals were deployed in live trading.
- Used two different ways to calculate earnings date abnormal event volatility, and subtract the event volatility from the vol. surface to create two cleaned vol. surfaces in a point-in-time fashion, which I used to construct features to predict 3-month ATM options price.

Zhixin Financial Investment Management Co., Ltd — *Quantitative Research Intern* *Apr 2024 - July 2024 — Beijing, China*

- Utilized announcement data and employed natural language processing techniques along with LLMs for text segmentation and sentiment analysis. Used the sentiment factors to predict high-risk stocks for the upcoming period.
- Conducted research on commodities timing strategies, mining factors based on volume and price data, and developing new factors using Python packages such as TA-Lib. Identified representative prediction patterns, formulated trading strategies, and tested them on a back-testing platform by IC values and returns, extending the approach to all varieties of futures.

China Securities Companies Financial Co., Ltd. — *Quantitative Research Summer Intern* *Jun 2023 - Aug. 2023 — Beijing, China*

- Integrated 200-plus daily quantitative factors selected from sell-side research reports into ten categories, including reversal, correlations, etc. Replicated high-frequency factors on the last 10 years' historical data, conducted single-factor group backtesting. Combining well-performing factors to construct multi-factor investment strategies to obtain a higher Sharpe ratio.
- Applied machine learning methods, using the time-serial variation of the Transformers model and factors as input to predict yield performance as a basis for portfolio stock selection. Obtained positive performance regarding long portfolio return.

Research Experience

University of Chicago — *Research Assistant – HFT Execution Strategies* *May 2023 - Apr 2024 — (Remote) Beijing, China*

- Instructed by Dacheng Xiu, processed millisecond trades and per-second order book data for China A-shares; engineered microstructure features (imbalance, spreads, microprice) and applied discrete-time Markov chains to estimate short-horizon state transitions.
- Designed intraday execution strategies: implemented VWAP with 5-minute child orders as baseline, then developed state-aware variants that adjusted order timing using DTMC forecasts; simulated realistic partial fills and benchmarked execution quality (implementation shortfall, fill/cancel rates) across large-scale backtests.

Miscellaneous

- **Computer:** Proficient in Python, good at C, C++, experienced in JavaScript, Solidity, R, Stata, and machine learning.
- **Leadership:** Chief of Micro-Salon Department at Tsinghua Univ. Association of International Organizations.
- **Languages:** Native Chinese, proficient in English.
- **Interests:** Tennis, Ultimate Frisbee, Basketball, History, Hip-hop Arts, Traveling