

# LEXI (ANTHONY) YAO

(518) 256-1722 // [lexiyao@nyu.edu](mailto:lexiyao@nyu.edu) // [linkedin.com/in/lexiyao](https://www.linkedin.com/in/lexiyao)

## EDUCATION

---

- Expected 12/26 **NEW YORK UNIVERSITY** New York, NY  
**The Courant Institute of Mathematical Sciences**  
**M.S. in Mathematics in Finance**
- **Expected Coursework:** stochastic calculus, asset pricing, computing in finance, portfolio management, derivative market, machine learning, market microstructure, time series analysis
- 09/21 - 06/25 **CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS** Beijing, China  
**B.Econ. in Financial Engineering**
- **Coursework:** advanced algebra, stochastic process, financial econometrics, big data in finance, data structures and algorithms, artificial intelligence, numerical methods in finance
  - **Awards:** Academic Excellence Scholarship for 2021-2022 and 2023-2024
  - **Thesis:** "Turnover Effect and Mispricing in Chinese Stock Market: Based on Endogenous Beta Perspective"

## EXPERIENCE

---

- 05/25 - 07/25 **JINYI CAPITAL** Beijing, China  
**Quantitative Research Intern (Python)**
- Reconstructed original order book from tick-by-tick transaction data and order flow information
  - Constructed over 300 daily and intraday order factors based on snapshot tick data, tick-by-tick transaction records, and original order book information
  - Collaborated on development of company's high-frequency trading system, optimized factor construction algorithms, and improved efficiency of order factor data ingestion
- 01/25 - 04/25 **HUATAI SECURITIES CO., LTD.** Shanghai, China  
**Quantitative Research Intern (Python)**
- Applied LSTM and Lasso algorithms to enhance pair trading strategies, significantly improving risk-adjusted returns, with Sharpe ratio rising from 1.49 to 2.06
  - Utilized XGBoost algorithm to develop weekly multi-factor strategy, achieving Sharpe ratio of 3.23 with 4.81% maximum drawdown
  - Achieved 18.13% annual return through portfolio optimized by Black-Litterman model, including 18 assets from commodities to stocks
- 07/23 - 10/23 **GUOTAI HAITONG SECURITIES CO., LTD.** Shenzhen, China  
**Quantitative Allocation Intern (Python, KDB)**
- Used KDB to construct over 100 price-volume factors from minute-level stock data; Used Python for factor normalization and market capitalization neutralization
  - Developed single-factor backtesting program for decile categorization and show metrics like annual volatility, Sharpe ratio, and maximum drawdown
  - Improved average factor annual return to 22.43% through factor aggregation weighted by information coefficient of each factor

## PROJECT

---

- 09/23 - 01/24 **CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS** Beijing, China  
**Application of Multi-Factor Strategy Based on Stacking Algorithms**
- Mined 54 factors across 7 dimensions including momentum and profitability
  - Applied logistic, random forest, SVM, LightGBM, and XGBoost algorithms for investment
  - Constructed stacking ensemble learning model with multiple algorithms; conducted backtesting on aggregated ensemble models

## COMPUTATIONAL SKILLS / OTHER

---

**Programming Languages:** Python, C++, MATLAB, SQL

**Languages:** English (fluent); Mandarin (native)

**Activities:** Advanced Mathematics teaching volunteer at Central University of Finance and Economics