SIJIA (SCARLETT) LI

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EDUCATION

Expected 12/26 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance

- ***Expected Coursework:*** computing in finance, financial securities and markets, risk & portfolio management, stochastic calculus & dynamic asset pricing

09/21 - 06/25 **CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS** Beijing, China
B.S. in Financial Engineering

- ***Coursework:*** stochastic process, ordinary differential equations, probability and statistics, algebra, calculus, operations research, econometrics, C++ programming
- ***Honor:*** First-Class Scholarship (5%), 2nd Prize in Beijing Undergraduate Math Competition

EXPERIENCE

07/25 - 04/25 **SHANGHAI REDWALL TAIHE FUND MANAGEMENT CO., LTD.** Shanghai, China
Strategy Research Intern (Python, C++)

- Processed Level-2 order book and trade data to develop minute-level stock alphas, including order imbalance and retail behavior factors
- Enhanced genetic programming framework to generate alpha factors with information coefficients (ICs) exceeding 3; integrated and adjusted highly correlated factors into strategies
- Boosted computational efficiency by restructuring code and applying performance-optimized tools such as Polars and Numba

10/24 - 03/25 **CHINA INTERNATIONAL CAPITAL CORPORATION (CICC)** Beijing, China
Quantitative Research Intern (Python, SQL)

- Developed minute-level alphas for stocks using Python and SQL; backtested strategy using 10-year historical data, achieving 0.02 increase in model's IC
- Analyzed fund data to develop FOF products; tracked equity and CTA market indicators, and performed product risk and return attribution based on quantitative multi-factor models
- Enhanced program efficiency by utilizing C functions and multi-processing techniques

06/24 - 09/24 **SOUTHWEST SECURITIES** Beijing, China
Quantitative Research Intern (Python)

- Designed weekly adjusted stock and convertible bond alpha strategies using machine learning algorithms, yielding an annual return of over 30%
- Implemented strategies to capture yields from index volatilities in equity market
- Monitored portfolio positions and fund performance metrics; drafted analytical reports

PROJECTS

07/24 - 10/24 **BEIJING INSTITUTE OF BIG DATA, PEKING UNIVERSITY** Beijing, China
Financial Large Language Model Development for Bank of China (BOC)

- Constructed multi-agent conversation patterns to predict macroeconomy and asset prices
- developed Q&A systems using retrieval-augmented generation (RAG) techniques, constructed an evaluation model to measure answer quality in aspects including hallucination and relevance

07/23 - 05/24 **CENTRAL UNIVERSITY OF FINANCE AND ECONOMICS** Beijing, China
Research on Machine Learning-based High-Frequency Quantitative Trading Strategies

- Built a comprehensive trading factor library, including liquidity, risk, and momentum; applied macroeconomic indicators and cross-asset trading data to construct alternative factors
- Applied machine learning algorithms such as LightGBM and Catboost to develop strategies

COMPUTATIONAL SKILLS / OTHER

Programming Languages: C++, Python, R, SQL, MATLAB
Languages: English (Fluent), Mandarin (Native), Cantonese (Native)