JIONGYANG (MAXWELL) HE

(201) 565-6328 // jiongyang.maxwell.he@nyu.edu // linkedin.com/in/jiongyang-maxwell-he

EDUCATION

Expected 12/23 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance

- ***Expected Coursework:*** OOP and data structure in Java, risk and portfolio management, financial securities and markets, stochastic calculus, statistics and data science, machine learning, market microstructure, asset pricing, scientific computing in finance, algorithmic trading

09/17 - 07/21 **PEKING UNIVERSITY** Beijing, China
B.S. in Mathematics and Applied Mathematics

- ***Coursework:*** calculus, linear algebra, abstract algebra, analytic geometry, ODE, PDE, real analysis, complex analysis, topology, functional analysis, mathematical model, differential manifolds, Riemann-Roch Theorem, mathematical logic, probability theory, applied stochastic process, combinatorics, data structure and algorithm (Python), regression, decision tree, basic neural network, SVM, Bayes classifier, ensemble learning, unsupervised learning, computational learning theory

EXPERIENCE

11/21 - 04/22 **DYNAMIC TECHNOLOGY LAB**
(A leading international hedge fund) Shanghai, China
Quantitative Research Intern

- Built features from Chinese stock market imbalance messages during opening auction and historical data; predicted short-term stock price returns after market open using LightGBM
- Created engine that picked factors to predict short-term stock price returns after market open using linear regression with orthogonalization in 2 US stock markets
- Backtested strategy based on above models and achieved stable performance with overall PnL/trading values > 1e-3 on test sets

07/21 - 09/21 **JQ INVESTMENT MANAGEMENT**
(A top Chinese hedge fund) Shanghai, China
Quantitative Research Intern

- Constructed order book matching engine with high-frequency message-based data
- Conducted research on market microstructure; analyzed order book derived snapshot characteristic to explore patterns of orders (especially those with 3 different kinds of sizes)
- Applied vectorization methods, NumPy and Pandas built-in functions, and multiprocessing programming to accelerate processing of large-scale data

01/20 - 02/20 **RUITIAN INVESTMENT MANAGEMENT**
(A top Chinese hedge fund) Shanghai, China
Quantitative Research Intern

- Used NumPy and Pandas packages and Linux operating syntax to backtest some factors
- Studied numerical optimization and discussed paper on that with mentor

HONORS

11/16 Gold Medal (61st in China), 32nd China Mathematics Olympiad (CMO)
10/15 & 10/16 First Prize, The National High School Mathematics League

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Python, C++, Java
Languages: English (fluent); Mandarin (native); Shanghainese (native)
Affiliation/Certification: Member of quant department of Hedge Fund Association; C++ Programming for Financial Engineering from QuantNet