

MINGSEN (MASON) WANG

Mingsen.Wang.BaruchMFE@gmail.com • linkedin.com/in/mingsen-wang • 201-736-7029

EDUCATION

BARUCH COLLEGE, CITY UNIVERSITY OF NEW YORK

Master of Science in Financial Engineering, expected December 2023

Ercalano Award for Best Student of the Year 2023

Jim Gatheral Academic Excellence Scholarship 2023

07/22

–Present

PEKING UNIVERSITY

Bachelor of Economics; Major: Economics, National Development

09/18

–07/22

FINANCIAL EXPERIENCE

AXQ CAPITAL, Jersey City, NJ

Quantitative Research Intern

06/23

–08/23

- Constructed multiple original metrics for factor crowding calculated from daily aggregated order flow data and market-wide short interest data, applicable to Barra-MSCI regional equity risk factor models and other customized risk factor models
- Developed a factor tilting strategy from the metrics with consistent out-of-sample performances and high adaptability to multiple markets and customized factors
- Replicated and generalized equity risk factor crowding metrics from academic papers and data vendors

AXIOMQUANT, Beijing, China

Quantitative Research Intern

02/22

–05/22

- Built a web scraping tool to retrieve and parse public holding xml report through the SEC archive and an RSS feed using Python and the BeautifulSoup package
- Devised and formulated a clustering scheme and a family of features based on holding reports from hedge funds
- Developed a strategy based on said factors neutralized against market, sector, and style risk factors; a three-year out-of-sample backtesting based on a subset of Russell 3000 yields a Sharpe ratio of 1.60

BANK OF CHINA INTERNATIONAL, Shanghai, China

Macro and Strategy Analyst Intern, Asset Management Department

07/21

–09/21

- Conducted literature review on the impact of foreign exchange market shocks on the local stock market
- Investigated how the Chinese stock market responds to dynamic impulses in exchange rates with VAR models

ROTMAN INTERNATIONAL TRADING COMPETITION

- Member of the 1st place Baruch MFE team (out of 43 teams)
- Designed an options trading strategy to capture market-maker mispricing and volatility news shifts
- Analyzed market impact and liquidity through limit order books for energy commodities
- Developed automatic trading algorithms using Python and manual trading interfaces using Excel and VBA
- Cases: Commodities, Liquidity Risk (Equities), Options, Algorithmic Trading

FINANCIAL MODELING SKILLS

- Feature development and evaluation; stock trading strategy backtesting and robustness analysis
- Market microstructure: bid-ask spread analysis, market impact models, optimal liquidation strategies
- Data science: MCMC (Metropolis-Hastings, Gibbs sampler, Hamiltonian MC), time series analysis (ARIMA and variants, spectral analysis, VECM, GARCH), Bayesian analysis, graphical lasso
- Machine learning: hyperparameter tuning, kernel machines, random forest, boosting, cluster analysis (kNN, Gaussian mixture), pre-trained neural network
- Empirical research strategies: regression discontinuity/kink design, synthetic controls, instrument variables, quantile regression, and propensity score matching

PROGRAMMING AND COMPUTING SKILLS

C++, Python (NumPy, pandas), Stata, Excel, PowerPoint

AWARDS & CERTIFICATIONS

Baruch MFE Alumni Excellence Prize

04/23

Advanced C++11/C++14 and Multidisciplinary Applications Certificate with Distinction, QuantNet

03/22

ACTIVITIES AND INTERESTS

Backpacking (4 days in the John Muir trail before summiting Mt Whitney, the highest point in the contiguous US), Sailing