WEI (ANDY) YUAN

(201) 993-9268 // wei.andy.yuan@nyu.edu // linkedin.com/in/weiandyyuan/

EDUCATION

Expected 12/23 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance
- *Coursework:* derivatives pricing, stochastic processes, time series analysis, SVM, OOP, linear regression, Fama-French, Black-Scholes, Greeks, interest rate models, optimization, Brownian motion, fast Fourier transform, decision tree
- *Upcoming Coursework*: CNN, RNN, LSTM, Transformer, Hidden Markov Model

08/18 - 05/21 **INDIANA UNIVERSITY** Bloomington, IN
B.S. in Mathematics, B.A. in Economics with High Distinction
- *Coursework:* statistics, ODEs, econometrics, multi-factor models, time series models
- *Award:* James E. Moffat Scholarship (Highest GPA in Economics Department in 2020)

EXPERIENCE

05/23 - 08/23 **LINGJUN INVESTMENT MANAGEMENT PARTNERSHIP** Beijing, China
Alpha Research Intern (Python)
- Researched Chinese A-shares at 5-minute intervals for >500 data fields (e.g., limit order book, order flow, price, volume) at this quant hedge fund with $10B AUM
- Developed multi-process framework for sensitivity testing of high-frequency factors in Linux, enabling 40% improvement in Sharpe ratio (e.g., volatility factors)
- Cleaned tick-level stock data and aggregated it into 5-minute fields, adding 7 new factors to firm's alpha pool

09/21 - 03/22 **GALAXY DERIVATIVES CAPITAL MANAGEMENT** Shanghai, China
Quantitative Analyst Intern (Python)
- Designed and backtested futures trading strategy, with Sharpe ratio of 2.1, by using fundamental data and Backtrader library
- Constructed multi-factor model and factor analysis structure that analyzed performance of fundamental and technical factors of chemical commodities futures
- Applied Markowitz's mean-variance and risk parity techniques to optimize fund allocation for futures trading strategy, which decreased maximum drawdown to 5%

09/20 - 10/20 **ALLIED MILLENNIAL PARTNERS** New York, NY
Quantitative Analyst Intern (Python)
- Analyzed Charles Schwab Corporation's common stock returns using AR(1) model; tested whether they achieved weak efficient market criteria
- Created dummy variable model and examined seasonality in financial markets by exploiting ordinary least squares regression
- Charted data (e.g., PE ratio, ROE) of Schwab compared to other financial services firms'

PROJECTS

07/23 - 08/23 **NYU COURANT** New York, NY
Time Series Analysis for 14 Portfolios (Python)
- Analyzed daily returns from 14 portfolios in multiple market environments (2005 - 2022)
- Built ARIMA, GARCH, and SVR models to forecast portfolio returns for 1-, 3-, and 6-month periods; found SVR model worked best – mean square error (MSE) was smallest
- Rebalanced portfolios monthly with applied risk parity, mean-variance optimization, and Black-Litterman; achieved 1.8 Sharpe ratio (by applying mean-variance optimization)

01/22 - 03/22 **BARUCH COLLEGE** New York, NY
Options Pricing System (C++)
- Built options pricing system with Boost and STL libraries, and OOP technique
- Used exact pricing for European and perpetual American options; built Greeks functions
- Applied Monte Carlo and finite difference methods for pricing European options

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Python, C++, MATLAB, VBA, SQL, Linux
Languages: English (fluent), Mandarin (native)
Activity: North American Debate Contest for Chinese University Students (team ranked #2 of 20)