Shaohan (Han) Wang

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EDUCATION

Cornell University, College of Engineering, New York, NY
Master of Engineering in Financial Engineering, **GPA: 3.825** **December 2021**

Pennsylvania State University, State College, PA
Bachelor of Science in Mathematics (Systems Analysis) & Bachelor of Science in Economics, **GPA: 3.76** **May 2020**
Honors: Dean's List (for 6 semesters)

Selected Coursework: Monte Carlo Simulation, Derivatives Securities, Fixed Income Securities, Optimization Modeling in Finance, Quantitative Trading Strategies, Data Mining and Machine Learning, Statistics for Financial Engineering, Big Data Technologies, Linear Algebra, Introduction to Econometrics

EXPERIENCE

Strategy & Transactions - Complex Securities Valuation Senior, *Ernst & Young LLP*, New York, NY **Mar. 2022-Present**

- Providing valuation consulting services for non-audit clients and valuation review support for audit clients, assisting them in meeting financial reporting requirements or resolving tax issues.
- Valuing complex financial instruments associated with the M&A deals such as Earn-outs, preferred and common stock in privately held companies, management incentive plans, convertible bonds, municipal and corporate bonds, warrants and other contingent assets and liabilities.
- Participating in firm-wide existing Excel/MATLAB based convertible bond models enhancement and transition into python to improve the model performance and efficiency.

Intern Quantitative Researcher (remote), *Axiomquant Investment Management,* Beijing, China **June 2021-Aug. 2021**

- Independently developed a pricing model of the trading convertible bonds in Chinese market by applying Monte Carlo simulation and Least Square Monte Carlo approach to capture the embedded American option feature using Python.
- Simulated the underlying sample path by applying Geometric Brownian motion with jumps and tested the model performance with Black-Scholes formula and output visualization using machine learning techniques.

Intern Equity Research Analyst, *Tigress Financial Partners,* New York, NY **July 2019-Aug. 2019**

- Compiled macroeconomic weekly reports with diagnostic plots from China by analyzing macro indicators with national policies using R and Excel.
- Developed company profiles by analyzing financial statements focused on Game, Education and Live Platforms to assist mentor to rate the company stock performance.

PROJECTS

Forecasting Drug Revenue using Alternative Data, *Jefferies Group LLC,* New York, NY **Sep. 2021-Dec. 2021**

- Explored the alternative datasets and extracted the potential features by data wrangling and feature engineering techniques.
- Applied both unsupervised and supervised Machine Learning models such as K-Means Clustering, XGBoost and other methods, to predict the trend and period of future drug revenue ramps using Python and R.

Portfolio Optimization with Momentum Factor, *Cornell University*, Ithaca, NY **Apr. 2021-May 2021**

- Applied fundamental factor model along with momentum effect to estimate the asset return values at each sample time point using Python.
- Determined the optimal portfolio weight for each individual asset and constructed the optimal portfolio by applying traditional Markowitz optimization setup.

Assistant for Research Economist (remote, part time), *Massachusetts Institute of Technology*, Cambridge, MA **Sep. 2019-Oct. 2019**

- Researched development of the Capital Asset Pricing Model; evaluated and optimized portfolios using Python.

SKILLS & INTERESTS

Technical: Python, R, MATLAB, Excel VBA, Git/GitHub, Linux System, Stata, Mathematica, Microsoft Office
Interests: College Guitar Club; writing songs; piano; tennis