Shaohan (Han) Wang

U.S. Permanent Resident

4220 24th St. Apt. 30E, Long Island City, NY, 11101

sw2265@cornell.edu **EDUCATION**

Cornell University, College of Engineering, New York, NY

Master of Engineering in Financial Engineering, GPA: 3.74

Expected December 2021

cell: (814) 880-5578

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, Optimization Modeling in Finance, Quantitative Trading Strategies, Data Mining and Machine Learning, Statistics for Financial Engineering, Big Data Technologies, Fixed Income Securities, Linear Algebra, Introduction to Econometrics

SKILLS

Technical: Python, R, Git/GitHub, Linux System, Stata, Mathematica, Microsoft Office

EXPERIENCE

Intern Quantitative Researcher (remote), Axiomquant Investment Management, Beijing, China

June 2021-Aug. 2021

- Independently developed a brand-new pricing model of 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 to further improve the model accuracy.

Equity Research Intern 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.

Investment Banking Intern Analyst, Ferghana Partners Group, New York, NY

June 2018-Aug. 2018

- Performed analysis on target company's financial statement and fundamentals in order to assess their industry status by building simple linear model on Excel based on historical data.
- Collected information of counterpart companies in China and the U.S.; created and updated target profiles with financial information and product descriptions for further analysis.

PROJECTS

Forecasting Drug Revenue using Alternative Data, Jefferies Group LLC, New York, NY

Sep. 2021-Present

- Explored the alternative datasets and extracted the potential features by data wrangling.
- Applied Machine Learning models to predict the trend and period of drug revenue ramps with the selected drug characteristics as machine input features.

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 pricing models; evaluated and optimized portfolios using Python.

LEADERSHIP EXPERIENCE/INTERESTS

Peer Tutor for Mathematics, *Pennsylvania State Learning*, State College, PA

Dec. 2018-May 2019

Assisted students in their first- and second-year calculus class; leading organized exam group studies and activities.

Interests: College Guitar Club; piano; tennis; basketball