Wyatt Nechtman

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Education

Georgia Institute of Technology **Atlanta, GA**
• M.S. Quantitative and Computational Finance - GPA: 3.61 *Expected Dec 2022*
• M.S. Biomedical Engineering - GPA: 3.70 *May 2021*

University of Georgia **Athens, GA**
• B.S. Biochemistry and Molecular Biology, Minor in Biology - GPA: 3.71 Cum Laude *Aug 2020*

Work Experience

Georgia Tech Foundation **Atlanta, GA**
Investments Intern *Aug 2022 – Present*

- Developed framework for modeling active portfolio risk for different allocation tilts using object-orientated programming.
- Used framework to decompose factor risk and generate portfolio re-balancing insights.
- Created a risk analytics dashboard for the equity book using Dash to visualize factor correlations and other risk indicators.

Wells Fargo **Charlotte, NC**
Quantitative Intern Program – Decision Science & Artificial Intelligence *June 2022 – Aug 2022*

- Explored and enhanced the Explainable Boosting Machine/GAMI Tree Model.
- Manipulated interaction terms, enforced monotonicity, and further tuned parameters to comply with regulations and agree with human logic while maintaining model performance.
- Extended the model enhancements from regression to classification tasks.

Research Experience

Financial Services Innovation Lab, Georgia Institute of Technology **Atlanta, GA**
Summer Research Student *May 2021 – Aug 2021*

- **Natural Language Processing in Financial Markets**: Leveraged background knowledge in life sciences and biotechnology to research market moving events in the biotech sector. Parsed and analyzed 10-K filings to correlate language with events.

Projects

• **Sentiment Based Trading Strategy**: Screened small cap stocks based on high upside implied volatility, used a Twitter bot to grab tweets related to stocks and held top 10 based on sentiment analysis in our portfolio.

• **Forecasting the Shape of the Yield Curve**: Filled US Treasury data across maturities using Nelson-Siegel model, reduced data with PCA, then using clustering algorithms, classified the shapes of the yield curves and compared to economic conditions.

• **Social Media's Influence on "Meme" Stocks**: Created linear regression, ARMA/ARIMA/SARIMA, and LSTM Neural Network models to forecast effects of social media hits on individual stock returns.

• **Momentum Trading Strategy**: Developed a momentum portfolio long the top 10% and short the bottom 10% of S&P based on prior 12 month's returns, and calculated performance using future returns of holding this portfolio over multiple time horizons.

• **Dynamic Delta Hedging**: Implemented a dynamic delta hedging strategy in C++ by simulating stock price paths, using Black-Scholes model to price options on each path, calculating profit and loss with and without hedge, and calculate implied volatility given stock and options market data.

• **Return Predictability in Treasury Markets**: Replicated Pflueger and Viciera's 2013 research paper by using real rates, liquidity, and inflation to predict returns in Treasury securities and extended data to include aggregate bond index data.

Skills & Relevant Coursework

Programming: Python, R, C++, MatLab, SAS, Julia, LaTeX, General Zsh/CLI, Bloomberg

Other Relevant Coursework: Financial Optimization, Design & Implementation of Systems in Computational Finance, Stochastic Processes in Finance, Derivative Securities, Financial Management, Tech Firm Valuation, Numerical Methods

Awards & Interests

Awards: Eagle Scout, UGA CURO & Chemistry Stipends, UGA BUS Symposium Best Presentation, Phi Eta Sigma

Publications: *KLHL5 Knockdown Increases Cellular Sensitivity to Anticancer Drugs*: 10.18632/oncotarget.26462

Interests: UGA Football, Golf, Hunting & Fishing, Atlanta Intramural Sports Leagues: Kickball, Softball, Cornhole