Ryan Slattery

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EDUCATION

PRINCETON UNIVERSITY   **Princeton, NJ**

Master in Finance Candidate, pursing Graduate Certificate in Machine Learning   *September 2021 – May 2023*

- Anticipated Coursework: Statistical Analysis of Financial Data, Financial Econometrics, Machine Learning and Pattern Recognition, Statistical Theory and Methods, Linear & Nonlinear Optimization, Statistical Foundations of Data Science

PRINCETON UNIVERSITY   **Princeton, NJ**

Bachelor of Science in Engineering, Major in Operations Research & Financial Engineering (ORFE)   *September 2012 – May 2016*

Certificates (Minors) in Computer Science & Finance

- Cumulative GPA: 3.9/4.0, Summa Cum Laude, ORFE Department's Highest Honors
- Honor Societies: Phi Beta Kappa (National Academic Honor Society), Tau Beta Pi (National Engineering Honor Society), Sigma Xi (Scientific Research Honor Society)
- ORFE Coursework: Regression and Applied Time Series, Operations and Information Engineering, Financial Mathematics, Risk Analysis, Probability and Stochastic Systems, Queuing Theory, Optimization, Statistics
- Computer Science Coursework: Algorithms and Data Structures, Computing and Optimization, Programming Systems
- Math Coursework: Multivariable Calculus, Linear Algebra, Ordinary Differential Equations, Partial Differential Equations

PROFESSIONAL EXPERIENCE

GOLDMAN SACHS   **New York City, NY**

Strats (Quant) Associate, Equity Derivatives & Convertible Debt, Investment Banking   *March 2018 – April 2021*

- Responsible for modeling, pricing, and analyzing risks associated with a range of exotic equity derivatives deployed in GS's proprietary securities database; products included share repurchase and share sale programs, convertible debt, and equity hedging instruments for corporate clients
- Developed production models for bespoke derivatives for real-time risk calculations, utilizing backwards induction and Monte Carlo methodologies as well as various volatility models
- Optimized and deployed execution strategies through the implementation of heuristics and gradient descent techniques for the buyback desk
- Implemented machine learning algorithms that employed dimensionality reduction and gradient boosting methods as well as regression analysis to proactively identify candidates for derivative products; models utilized disparate datasets across trading characteristics, corporate fundamentals, and shareholder data

Strats (Quant) Analyst, M&A and Corporate Finance, Investment Banking   *June 2015 – August 2015, July 2016 – February 2018*

- Quantified the impact of various strategic and financial decisions made by corporates on shareholder and enterprise value through the application of classical econometrics and time series analysis as well as modern machine learning and big data techniques; replicated research from relevant academic papers to answer questions posed by corporate institutions
- Developed statistical analyses to measure the impact of changes in business profitability metrics on valuation, predict the likelihood of activist campaigns based on corporate fundamentals, and understand post-M&A announcement performance
- Analyzed shareholder flows to measure and predict investor demand, reaction, and sentiment to corporate actions, especially in the context of transformative M&A transactions or major shifts in capital return policy; deployed internal applications to provide teams with real-time access to analytics
- Optimized corporate capital structure and capital allocation plans through Monte Carlo simulations of relevant business factors that impact revenue and costs to understand leverage and cashflow risks

RESEARCH EXPERIENCE

PRINCETON UNIVERSITY   **Princeton, NJ**

Senior Thesis, "A Statistical Analysis of Delinquency and Prepayment Risk in Subprime MBSs"   *September 2015 – April 2016*

- Provided a statistical framework to quantify default and prepayment risks of mortgage-backed securities using monthly data on millions of loans from the early 2000s to assess the appropriateness of agency ratings in the wake of the 2008 Financial Crisis
- Winner of the *S.S. Wilks Memorial Prize* for the best thesis on "statistics and its applications to solving societal problems"

SKILLS & INTERESTS

- Computer Languages: Python, R, SQL, Java, C, Tableau
- Interests: Surfing, Sudoku, Long Distance Biking, Pickleball