JACK RICKEY

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EDUCATION

University of Maryland College Park, Robert H. Smith School of Business College Park, MD, USA
Master of Quantitative Finance, GPA 3.8, GMAT 700 Expected Graduation: May 2024

- Teaching Assistant: Fixed Income Analysis & Fixed Income Derivatives
- Freddie Mac Experiential Learning Program Candidate
- University Senate: Graduate Student Representative on the Faculty Affairs Committee
- Impact Consulting Fellowship: Pro-Bono Consultant for Bludot.io

Bachelor of Science, Mathematics August 2021

- Student Assistant: Office of the Registrar 2019-2021

WORK EXPERIENCE

The Easier Data Initiative College Park, MD, USA
Research Analyst March 2023 - Present

- Led analysis on the research objective of hot/cold storage optimization. Developed multiple simulation models, utilizing stochastic processes, multi-factor regression, and dimension reduction techniques to provide actionable insights.
- Designed and implemented a generalized impact evaluator, developed simulation frameworks to analyze the economic incentives of decentralized storage providers.

Feta Market Remote
A Decentralized NFT Options Marketplace February 2022 - January 2023
Co-Founder

- Led a cross-functional team of ten to successfully develop and launch a Minimum Viable Product (MVP) within a 10-month timeframe, validating the market fit and attracting initial user adoption.
- Organized and executed a pre-seed funding round, led external communications, developed synergies with market leading products.
- Led model development and validation, creating an American option pricing model tailored to liquidity constrained assets.

Jack Rickey Consultations LLC Rockville, MD, USA
Freelance Consultant January 2021 - January 2023

- Designed a reward function in Matlab for a decentralized VPN protocol which rewards network participants based on bandwidth, uptime, and location. Ran simulations based on test participant data in Python.
- Fine tuned parameters of a Variable Rate Gradual Dutch Auction to price in-game items for a gamified risk protocol.
- Implemented risk-neutral probabilities and martingale properties for a probability-based game protocol. Simulated game outcomes in Python.

RELEVANT COURSEWORK

Fixed Income Derivatives Spring 2023

- Developed a comprehensive presentation on the collapse and receivership of Silicon Valley Bank (SVB). Leveraged 10K reports to create compelling visualizations using matplotlib, showcasing the factors leading to SVB's collapse.
- Conducted a Vasicek interest rate forecast through linear regression in Python to stress-test SVB's financial models.

Financial Mathematics Spring 2023

- Developed and honed an understanding of Itô's lemma, risk neutral pricing, brownian motion and Wiener processes, stochastic volatility models, SDE's such as the Black-Scholes equation, binomial/trinomial models, and Monte Carlo Simulations.
- Applied knowledge gained through python projects involving option replication for portfolio insurance, calculating early exercise premiums, and pricing exotic options such as shouts, fixed-strike lookback calls, and geometric/arithmetic Asian calls.

TECHNICAL SKILLS

- Pandas, Scikit-Learn, Matplotlib, R, Matlab, SQL, Tableau, Power BI, Excel