

JOHANAN ANTON PRANESH

Bethlehem, PA 18015 • my website • linkedin • johananton@outlook.com • (484) 935-9858

Education:

LEHIGH UNIVERSITY

August 2023-May 2025

Master of Science in Financial Engineering

GPA: 3.61/4.0

- Relevant coursework: Optimization Methods in Machine Learning, Stochastic Calculus, Financial Stochastic Analysis, Advanced Investments, Advanced Topics in Financial Risk Management

MADRAS CHRISTIAN COLLEGE

June 2019-May 2022

Bachelor of Science in Mathematics

GPA: 3.7/4.0

- Project work: Sentiment Analysis and Index Correlation Testing, Numerical Risk Methodologies
- Relevant coursework: Linear Algebra, Multivariate Calculus, and Linear Programming

Relevant Experience:

King Street Capital Management LP – New York City

May 2024-August 2024

Data Science Intern

- Converted unstructured alternative data into structured data & utilized to predict KPI growth/decline
- Back testing on 14 million+ survey responses for 3000+ companies across 84 industries
- Created a framework based on a unique methodology to translate data signals into investable actions
- Worked with the hedge fund's research team in front office, providing insight from alternative data

Corporate Sponsored Quant Projects:

Multifactor Investing

June 2023-Present

Corporate Sponsor: Associate at Hamilton Lane

- Spearheaded the development of a systematic framework for factor investing in equities & portfolio construction
- Employed advanced convex optimization, MILP methods to achieve target factor exposures & gradient reducing methods such as SVRG to mitigate errors, and reduce transaction costs
- Used reinforcement algorithm and insights from alternative data, back testing, & Monte Carlo simulations to recommend portfolios that provide downside protection while hedging factor decay, and maximizing returns

Third Party Litigation Financing Derivative Pricing

August 2024-Present

Corporate Sponsor: Attorney at McGuireWoods LLP

- Parsed through tens of thousands of unstructured lawsuits, court opinions gathered by web scraping and feature engineering using a LLM, NLP. Delivered summarized opinions on the lawsuit
- Worked on a new derivative's mathematical models based on the development of Black-Scholes-Merton, Altman Z Score, and machine learning models to price Third Party Litigation Financing contracts

PA 100 Index Development

June 2023- June 2024

Corporate Sponsor: Former CEO at S&P Dow Jones Indices LLC

- Engineered and developed an automated index utilizing data from CBOE, with a key focus on index rebalancing as a central feature, driving both scheduled and corporate action-driven trades.
- Designed market analytics and coding strategies to enhance rebalancing, aligning with trading practices in the industry

NLP for Predicting Credit Default Swaps Spreads

June 2023-December 2023

Corporate Sponsor: Quant at Morgan Stanley

- Leveraged Natural Language Processing (NLP) on earning call transcripts to analyze and predict movement in asset prices, specifically made for Credit Default Swaps (CDS)
- Curated a portfolio of CDS based on our model's results and checked for theoretical alpha generation

Skills:

Technical skills: Python, R, SQL, Functional Programming, Machine learning & Optimization, Statistical Analysis, Quantitative Finance & Modeling, Model Testing, Web Scraping, Monte Carlo Simulations, Rust (Novice)

Languages: English (main), French (A1), Tamil

Awards and Honors:

Human Rights' Award, Director's Merit fellowship, Best Entrepreneur Award

Certificates:

IBM Data Science Professional Certificate, Yale Financial Markets, Certificate in Data Analytics

Leadership experience:

Graduate Assistant, Department Representative, Class Representative, and Association Representative