VARUN VARANASI

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EDUCATION

Yale University *August 2020 - Present*

B.S. Intensive Physics (Major GPA: 3.9), B.A. Statistics + Data Science (Major GPA: 3.9) GPA: 3.8

Relevant Coursework: Statistical Theory, Bayesian Statistics, Algorithms, Data Structures, Machine Learning, Real/Complex Analysis, Classical Mechanics, Electrodynamics, Non-linear Dynamics, and Quantum Mechanics

WORK EXPERIENCE

Quantitative Trading @ IMC *June 2023 - August 2023*

- Completed a 5 week training program (financial theory + trading strategy) and a 5 week project evaluating TSLA option strategies for the equity/options desk

Teaching Assistant @ Yale *August 2022 - Present*

- Organized office hours, review sessions, and graded problem-sets for Yale's S&DS 238/538: Bayesian Statistics (w/ Prof. Joseph Chang) and S&DS 365/665: Intermediate Machine Learning (w/ Prof. John Lafferty)

Strategy Consulting @ Benjamin Maurice LLC *July 2021 - July 2022*

- Conducted projects in P.E. Due Diligence, FinTech Growth Strategy, and Market Penetration
- Wrote, managed, and analyzed market surveys, modeled 5 year cost-revenue projections, designed client-ready slides, and analyzed expert interview transcripts

Data Science @ Lantern Pharmaceuticals *May 2021 - August 2021*

- Developed a feature selection algorithm for Lantern's proprietary drug development pipeline and evaluated CodeOcean environment for company use

RESEARCH EXPERIENCE

Theoretical Biology, Yale University *January 2023 - Present*

PI: Prof. Jun Korenaga

- Conducted a senior thesis project utilizing Python-based models to analyze the formation and sustainability of autocatalytic reaction networks in pre-biotic chemical models

Quantitative Finance Research, Yale University *March 2021 - Present*

PI: Prof. Gregory Laughlin

- Predicting movement in the VIX index via geophysical models and alternative data
- Designed and tested backtrading schemes to evaluate the predictive power of fear metrics on the VIX index

Quantitative Social Science, Yale University *June 2020 - September 2021*

The Human Nature Lab, PI: Prof. Nicholas Christakis

- Developed a python-based regression model to classify COVID-19 infection risk for use in Hunala, a public health app developed by the lab

Chemical Engineering, North Carolina State University *June 2017 - May 2020*

The Dickey Group, PI: Prof. Michael Dickey

- Devised an novel deposition technique for liquid metal thin films tailored for self-healing electronics

AWARDS

2nd Place in Citadel Securities' Summer DataOpen *July 2022*

- Evaluated market inefficiencies in LendingClub's peer-to-peer lending market place

Top 2% in Mathworks Mathematical Modeling Challenge *February 2020*

- Modeled the adoption of electric trucks and infrastructure into the long-haul trucking industry

Top 1% in COMAP's Highschool Mathematical Modeling Challenge *November 2019*

- Developed agents-based models to predict the economic impact of charging devices in public spaces

SKILLS

Languages: Spanish (Intermediate), Telugu (conversational), and Mandarin (Beginner)
Technical Skills: Python (Advanced), R (Advanced), C (Beginner), and Microsoft Excel (Advanced)