VARUN VARANASI

919-619-4843 \(\phi\) varun.varanasi@vale.edu \(\phi\) https://www.varun-varanasi.com/

EDUCATION

Yale University

August 2020 - Present

B.S. Intensive Physics (Major GPA: 4.0), B.A. Statistics + Data Science (Major GPA: 3.9) GPA: 3.8 Relevant Coursework: Linear Algebra, Data Structures, Theory of Statistics, Bayesian Statistics, Data Analysis, Real Analysis, Complex Analysis, Classical Mechanics, and Electrodynamics

WORK EXPERIENCE

Strategy Consulting @ Benjamin Maurice LLC

July 2021 - July 2022

- Projects: P.E. Due Diligence, FinTech Growth Strategy, and Manufacturing Market Penetration
- Contributions: Wrote, managed, and analyzed two 60+ question market surveys, modeled 5 year costrevenue projections, designed 20+ client-ready slides, and analyzed 40+ expert interview transcripts
- Skills: Financial modeling, product positioning, market research, competitive landscape analysis, expert interviews, survey design and analysis (consumer and expert), slide design, client and 3rd party communication

Data Science @ Lantern Pharmaceuticals

May 2021 - August 2021

- Projects: Developed a feature selection algorithm for Lantern's proprietary drug development pipeline
- Contributions: Identified/implemented 3 correlation-based feature selection methods, modularized 10+ python scripts for use in a data pipeline, and evaluated CodeOcean environment for company use
- Skills: Python, CodeOcean, data analysis, correlation, and feature selection

RESEARCH EXPERIENCE

Quantitative Finance Research, Yale University

March 2021 - Present

PI: Gregory Laughlin

- Projects: Modeling S&P500 index volatility based on metrics of fear/uncertainty in the population
- Contributions: Designed and tested backtrading schemes to evaluate the predictive power of fear metrics on S&P500 volatility, and data scraped and conducted time series analysis on VIX, VXX, and Metaculus user data
- Skills: Python (BackTrader), algorithmic trading, data analysis, time series analysis

Quantitative Social Science, Yale University

September 2020 - September 2021

Human Nature Lab, PI: Prof. Nicholas Christakis

- **Projects/Contributions:** Developed a python-based predictive regression model for COVID-19 risk estimation in the US with 10+ public health predictors and over 10⁶ data points
- Skills: Python and machine learning

Chemical Engineering, North Carolina State University

June 2017 - May 2020

The Dickey Group, PI: Prof. Michael Dickey

- **Projects:** Created liquid metal thin films for applications in self-healing circuits and polymer encapsulated liquid metal droplets
- Contributions: Identified and designed novel experimental procedure for liquid metal deposition, optimized experimental efficiency, and conducted literature reviews
- Skills: Nanoparticle synthesis, electrophoretic deposition, and microfluidics

EXTRACURRICULAR

Jashan Bhangra

September 2020 - Present

- Treasurer: Write grants, bookkeep, and collaborate with local sponsors for all financial needs
- Perform classical Indian (Punjabi) dance at Yale and the local New Haven area

SKILLS

Languages: Spanish (Intermediate), Telugu (conversational), and Mandarin (Intermediate) Technical Skills: Python, R, C, functional programming, machine learning, and Microsoft Suite