

EDUCATION

Purdue University

Mathematics, Computer Science (Concentration: Machine Intelligence)

West Lafayette, IN

Graduation: May 2025

- GPA : 4.0
- Relevant Coursework: Statistical Machine Learning, Calculus-based Probability, Data Mining and Machine Learning, Systems Programming, Intro to Databases, Differential Equations, Real Analysis, Advanced Algorithms and Data

EMPLOYMENT

Munich Re US Life

Data Science Intern

New York, NY

June '24-Aug '24

- Developed a proof of concept to enhance risk segmentation of a mortality prediction model by integrating 2 novel datasets, providing ~40% improvement in performance.
- Designed and implemented feature engineering for WeaSEL model to predicts severity of mental health disorders.

Wharton School of Business, University of Pennsylvania

Research Intern

Philadelphia, PA

June '23-Aug '23

- Designed novel research study to analyze how different types of investors react to suspicions of real earnings management (manipulation of business activities to meet earning targets).
- Identified key differences by highlighting that ~80% sophisticated investors identify fraud 2-3 weeks before others.
- Presented my work at the Leadership Alliance National Symposium in the form of a poster.

Nuvve Holding Corp

Data Science Intern

Remote

July '22-August '22

- Created a forecasting model with 77% accuracy to predict energy consumption in Demand Response Auction Mechanism project to optimize bidding strategies.
- Implemented different feature engineering, feature selection and data preprocessing techniques such as Bayesian Optimization, Mutual Information Selection, and Lasso regularization.

Purdue University - Data Mine Corporate Partnership (Nuvve)

Undergraduate Teaching Assistant and Project Manager

West Lafayette, IN

January '22-May '23

- Leading a team of 20-23 students to build predictive models for forecasting energy prices with 80% accuracy and driver profiling
- Acting as a liaison between Nuvve, the Data Mine faculty and the students by implementing Agile methods and playing the role of Scrum Master effectively.

PROJECTS

Boiler Quant Finance Group - Purdue University

Options Pricing Project Lead

West Lafayette, IN

January '24-Current

- Leading a group of 5 to create Black Scholes, Jump Diffusion and Heston Stochastic Volatility models
- Developing an options trading strategy and predicting implied volatility using neural networks.
- Previously worked as an analyst to explore a Pairs Trading Strategy using Optics clustering and Principal Component Analysis.

Algorithmic Economics Research – Purdue University

Undergraduate Research Assistant

West Lafayette, IN

January '24-Current

- Utilizing Bayesian Persuasion techniques to explore decision making (examples include hiring for firms, admissions committee, etc.) under the guidance of Prof. Alex Psomas.

Purdue University Data Mine Corporate Partnerships – UPS

Undergraduate Researcher

West Lafayette, IN

August '21-May '22

- Spearheaded analysis of the Private Equity Market and various portfolio companies.
- Employed SciKit and Tensorflow libraries to build predictive models using KMeans ++ and regression algorithms.
- Utilized Streamlit to deploy our machine learning model and create an interface for UPS.

HONORS AND CERTIFICATIONS

- **Data Fest for 2022**– Best Visualization Award
- **L3Harris Scholarship Award for 2023** – Computer Science
- **Anna Berkowitz Scholar for 2023** - Mathematics