HILARY PRESENT

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY   **Atlanta, GA**
M.S. in Analytics, Computational Data Science Track   *August 2023 – August 2024*
- Graduated 18-month program in 12 months while working part-time at ML polymer research and AI-fintech firms
- 1 of 10 STEM students statewide nominated and selected for the Georgia Research Alliance Student Scholar program
- *Coursework and Extracurriculars:* Data and Visual Analytics, Statistical Modeling and Machine Learning, Information Security, Computer Vision, Simulation, Regression, Business Analytics, Energy Club, Business Analytics Club

UNIVERSITY OF VIRGINIA   **Charlottesville, VA**
Dual B.A. in Cognitive Science and Media Studies, Computer Science Track   *August 2017 – May 2021*
- *Work:* Paid for expenses by bartending at local restaurant; promoted to manager 2 years ahead of schedule

EXPERIENCE

MATMERIZE   **Atlanta, GA**
Pioneering company accelerating materials design by integrating polymer expertise with advanced data science techniques
Technical Lead in Data Analytics   *January 2024 – Present*
- Trained and optimized 400+ models to predict 24 polymer properties; improved mean R^2 105.6% and mean MAE 59.4%
- Led backend integration on Matmerize platform, leveraging Git and AWS to deploy predictive models
- Increased client engagement by 22% and conversion rate by 12% through market research and client acquisition strategies

HERCTECH   **Wilmington, DE**
AI- and Machine Learning-focused Fintech transforming active investment management
Data Analyst   *December 2020 – Present*
- Developed models to extract high-impact mutual fund portfolios, utilizing simulated annealing to avoid reversion to mean
- Created custom datasets using feature engineering and data sampling to extract crucial fund performance data for advanced modeling and predictions
- Analyzed 500+ million data points and developed insights and visualizations for firm's flagship 2023 White Paper

RESEARCH & PROJECTS

RAMPRASAD RESEARCH GROUP   **Atlanta, GA**
Georgia Tech lab leveraging Machine Learning to accelerate the discovery of novel materials
Research Assistant   *October 2023 – Present*
- Optimized model performance with GridSearchCV and LassoCV, achieving an 88.7% improvement in accuracy using advanced feature engineering and RDKit
- Implemented robust model validation using bootstrapping with XGBoost, reducing mean absolute error (MAE) and increasing R^2 by normalizing the distribution of transmission values
- Built neural networks in PyTorch to predict polymer/solvent mixture solubility on 16,000+ combinations of concentrations and temperatures

ATLytiCS DATA FOR HOPE™ COMPETITION   **Atlanta, GA**
Result: Team Won Second Place; Received Prize of $2000   *August 2023 – September 2023*
- Investigated year-over-year discrepancies in Atlanta's homeless population using NumPy, Pandas, and Tableau

GITHUB PROJECTS – SAMPLE OF PORTFOLIO
- **Air Quality Visualization**: D3.js for data visualization, HTML/CSS for frontend, and JavaScript for interactive features
- **House Price Prediction**: Python, Scikit learn for ML algorithms, and AWS for deployment
- **To-Do List:** HTML, CSS, and JavaScript for the frontend UI

FUN FACTS

Built and camped in an igloo for 2 weeks	Biked across the country in 6 weeks	Achieved TikTok fame for fun, then deleted the app