LinkedIn
Personal Website

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Education

Miami University **August 2020 – May 2023**

- B.S. in Computer Science, B.S. in Data Science and Statistics, B.A. in Mathematics
- GPA: 4.00
- University Honors Program and Computing and Engineering Scholar
- Relevant Courses: Algorithms, Data Structures, Database Systems, Object-Oriented Programming, Systems 1, Web Application Programming, Network Analysis and Modeling, Probability, Statistical Modeling, Optimization, Linear Algebra, Calculus 3, Proofs, Discrete Math

Experience

Software Engineer Intern **Joot** **May 2021 – Present**

- Web scraped SEC website and Form ADVs using Python and Pandas to produce a list of important officials for all 14,000+ Registered Investment Advisers with over 99% accuracy
- Built and deployed an API with Node.js and Google Cloud to take a firm's CRD number and generate and send a list of recommended policies based on firms most recent Form ADV to email provided
- Created and executed a script to transfer 70 signed documents from version 1 to version 2 of application leveraging Node.js, MongoDB driver, Google Cloud, and HelloSign API

Machine Learning Researcher **Malware Research Group** **October 2020 – Present**

- Performed feature extraction on over 100 GB of network traffic utilizing Python, Pandas, Scapy, and Miami University's high-performance computing cluster
- Fit a Kernel SVM algorithm employing Scikit-learn, Python, and Pandas on a subset of network traffic, distinguishing between botnet and non-botnet traffic with over 99% accuracy
- Presented current research findings to an audience of over 50 student researchers and professors at Miami University's Undergraduate Research Forum

Vice President of Projects **MU Blockchain Club** **October 2020 – Present**

- Led team of 3 developers in development of new MU Blockchain Club website using React and Material-UI
- Direct vision of 5 person development team and represent developer interests on Executive Board

Projects

Modeling Song Popularity

- Completed data processing and exploratory data analysis on 5 datasets from Spotify utilizing R
- Fit 4 regression models using R to identify significant predictor variables for song popularity
- Implemented repeated cross-validation with R to select an optimal model for predicting song popularity

Twitter Misinformation Analysis

- Scraped 1000 tweets containing coronavirus vaccine misinformation using Python, Snscrape, and Twitter API
- Analyzed tweets using Pandas and visualized data using Matplotlib to convey results and provide visualizations for web application teammates designed in React

Skills

- Proficient Programming Languages: Python, Java, C++, R, SQL, JavaScript
- Web Development: Node.js, MongoDB, React, Redux, Express.js, Material-UI, HTML, CSS

Honors and Awards

- President's List (2021, 2020), Redhawk Excellence Scholarship (2020-2024), University Academic Scholars Scholarship (2020-2024), Bridges Program for Excellence Scholarship (2020-2024), ACT Score: 35 (2018)