Yizhong Shao

519-716-9527 | y3shao@uwaterloo.ca | LinkedIn | Personal Website (Yichung.me) | GitHub

SUMMARY OF QUALIFICATIONS

- Motivated, innovative, and communicative individual with a strong passion.
- Languages & Tools: Python, HTML, C, R, SQL, Tableau, Excel (VLOOKUP. Index/xmatch, XLOOPUP, filter), Linux. Libraries: Panda, NumPy, PyTorch, requests, Django, Scikit-learn
- Willing to learn anything before coop even using most of my free time to work better for company. The only thing I'll do is to learn things and bring company what it needs! I strongly believe I can bring value.

EDUCATION

Bachelor of Math, Pure Math & Mathematical Finance Double Major Honors: President Scholarship, 1A, 2A Terms with Distinction

University of Waterloo Sep 2022 - Present

• Enrolled all the Math Advanced courses, which are the toughest in Canada

WORK EXPERIENCE

BMW Group

Aug - Dec 2023

Benchmarking & Data analyst

- Analyzing NEV total vehicle Benchmarking and report to Germany HQ
- Developed and maintained a business insights website using HTML and CSS, integrating data manipulation from SharePoint and Azure server sources.
- Performed data analysis using NumPy and Pandas on datasets retrieved from an AWS database
- Collected and analyzed domestic and global vehicle and ADAS (Advanced Driver-Assistance Systems) market data using Python (NumPy, Pandas, and additional libraries), PowerBI, and other analysis tools to facilitate comprehensive quantitative analysis for the project

Ningbo EPIC Electrics Feb - July 2022

Electric engineer

- Directly engaged in the development of an electric active suspension system for motorcycle. Developing the UI interface and motor control algorithm. (this suspension is our first product, using PID control for dampers)
- Researched the market and guiding the product development and marketing strategy, improved 400% avenue

University of Nottingham

Feb 2021 - May 2022

Research Assistant

- Designed myRIO program to collect laser measurements sensors data and putting them into analysis
- Used myRIO to develop a PWM/PID signal control to simulate the vibration from car driving on the road (by Electric Cylinder)
- Data analysis to suspension absorber, using MySQL and Python to clean data, based on the research need, re-create the csv file and using Tableau to visualize data.

EXTRACURRICULAR EXPERIENCE

YEAH Aug 2022- Jan 2023

Product Manager

- Joined a project of WEB 3.0 online education platform, specifically in the areas of decentralized finance (Defi) and NFT development, responsible for launching and asset management
- Resulting in a successful launch and adoption of the projects by investors.

University of Nottingham

Nov 2020 - June 2022

Team Chief Consultant of FSEC

- Lead a team of 12 from zero to winning the third prize in Formula Student Electric China (a formula race with own-built car, leading the power unit (battery and motor) development.
- Displayed management initiatives from hosting group discussions and regular meetings to agree on the team structure, task delegation, operation model

Project

Airflight Price Prediction

Oct 2023- Jan 2024

- Developed an advanced Flight Price Prediction model using Python, Pandas, and Scikit-learn, focusing on the Random Forest Regressor for its effectiveness in regression tasks.
- Applied meticulous data preprocessing techniques, including cleaning, transforming, and encoding categorical variables, to enhance the quality of the Kaggle-sourced flight dataset.
- Employed hyperparameter tuning to optimize the Random Forest model, balancing bias and variance for improved accuracy.
- Executed advanced feature engineering, transforming time-series data into structured features and utilizing Label Encoding for categorical data.