

Education

Purdue University, BEng in Computer Engineering

Aug. 2019 - May 2024

Certificate in Data Science & Entrepreneurship

National Taiwan University, Research Assistant

Coursework: Python for Data Science, Data Mining Techniques, Data Structures, Probabilistic Methods, Computer Security, Intro to AI, Computer Networks, Microprocessor, Object-Oriented in Java, Advanced C Programming, Linear Algebra, Discrete Math

Experience

Transglobe Insurance, Machine Learning Engineer Intern

Taipei, Taiwan | May 2023 - July 2023

- Developed method of detecting fraudulent insurance claims through exploring ML models & creating API endpoints for deployment
- Improved model prediction rate by 10% by creating new data features through PCA analysis, data standardization/normalization, fine-tuning model hyper-parameters, and applying domain-knowledge to analyze feature impact, presented product recommendations to engineers, manager, and chairman

PricewaterhouseCoopers (PwC), Data & Tech Intern

Seattle, WA | June 2022 - Aug. 2022

- Conducted transaction testing with SQL to query customer transactions data on Snowflake database to ensure the integrity of client's technology system processes to meet regulation requirements
- Automated control testing process for audit department by building & publishing Alteryx workflow in Python to identify anomalies in client data and perform data quality checks, published workflow onto internal website with 27 users across PwC offices

Merck & Co., Software Engineering Intern

West Lafayette, IN | Aug. 2021 - May 2022

- Digitized Merck's vial labeling system by creating an end-to-end application feature for Merck scientists using Python libraries (Numpy, plt, PIL, Flask), to generate/print labels based on information input, reducing manual data entry and allowing scientists to scan a QR code to look up vial information quickly via a web application
- Created API endpoints to insert/retrieve/update sample data from PostgreSQL server using Python object-relational mapping (ORM), implemented logging and error handling mechanisms to ensure data integrity and database consistency for safety requirements

Research/Projects

AI for Financial Literacy, Repo

Sept. 2023 - Present

- Built web application tool to improve my financial literacy by summarizing daily articles and defining financial terms for improved learning
- Created ReactJS frontend for displaying summaries and key financial terms, integration with Python backend through writing API's to fetch news articles, ChatGPT, and store data in MongoDB database

LibMultiLabel, Research Assistant, [Dr. Chih-Jen Lin](#)

July 2023 - Present

- Designed robust weights pruning feature for Python LibMultiLabel, a library used for multi-class text classification, to reduce the size of each models for improved memory management and model prediction speeds for end users
- Optimized model size and performance by creating pruning experiment on industry datasets and analyzing the effect of L1/L2 regularization on sparsity using Python/Bash

Picki - Food Decision Tool for Friends, [Slides](#)

Jan. 2022 - Feb. 2022

- Designed product to reduce social anxiety that allows user groups to anonymously choose nearby restaurants, ranking most picked restaurant amongst users
- Developed mobile app with restaurant selection and multi user session feature in Flutter, communicated with Python server and Google Map API, prototyping app design & functionalities in Figma
- Won 2nd Place at the annual Boilermake Hackathon

Skills/Hobbies

Languages: Python, SQL, React, Excel, Bash, C

Certification: AZ-900 Microsoft Azure Cloud, Udacity Data Engineer/SQL

Technologies: Microsoft Azure, AWS, Git, Confluence, Matplotlib, Docker, RDBMS, FastAPI, Flask, Django, MongoDB, Linux

Communication: Agile Software Development Methodology, Cross Functional Teams, Technical Reports, Project Management