

Shih-Yu (Zoe) Wang

(765) 413-1661

zoewang1379@gmail.com

[linkedin.com/in/shih-yu-wang](https://www.linkedin.com/in/shih-yu-wang)

EDUCATION

Purdue University

M.S. Business Analytics and Information Management

West Lafayette, IN

Aug 2024 – Aug 2025

National Chengchi University (NCCU)

M.S. Management Information System

Taiwan

Sep 2021 - Jun 2023

SKILL

Programming: Python, C/C++, Java, R, SQL/NoSQL, HTML/CSS, JavaScript/TypeScript, Node.js, Git, GitLab

Software: Flask, Angular, React, Docker/K8s, MongoDB, MySQL, DB2, AWS, Azure, Minitab, SAS, Tableau, Microservices

Data & AI: Pandas, Numpy, PyTorch, TensorFlow, Scikit-learn, NLP, LLM, Web Scraping, Data Pipeline, Data Warehouse

WORK EXPERIENCE

IBM

Taiwan

Application Consultant

Sep 2023 - Jun 2024

- Created user-friendly loan web applications for the Bank of Taiwan, enabling customers to automatically apply for loans online, enhancing application efficiency and reduce 33% manual review time
- Proposed a cross-border information sharing platform and global trading network for CTBC Bank, combined with WatsonX AI to assist bank staff, which is expected to generate a profit of approximately 25 million USD
- Implemented a full-stack application using the **Angular framework** to create reusable frontend components and developed a scalable, maintainable backend with **Spring Boot** and **DB2** as database
- Led the team in an **Agile** environment, managing project development, providing biweekly client reports on progress, and evaluating the feasibility of change requests

Advanced Network Technologies and Services Lab

Taiwan

Cybersecurity Engineer

Sep 2021 – Jun 2023

- Designed an **ensemble learning** method based on **Genetic Algorithm** to integrate antivirus inconsistent labels and re-cluster malware, providing trustworthy labeling with an accuracy of 83.6%, outperforming the baseline of 26.5%
- Architected malicious detect system in the **Linux** environment to auto-generate snort rules from **HTTP** packet payloads which help filter, process, and analyze the **network** packet, achieving 88% filtration rate

Synaptics

Taiwan

Software Engineer Intern

Jul 2022 - Dec 2022

- Developed **automated testing tools** with C++ on ODM docking products, reducing testing time by 20%
- Designed tools to **parse log** and generated debug messages for IC designers, improving 12% problem-solving time
- Analyzed end points usage data and diagnosed client issue for customers including Dell, HP, Lenovo, etc

Industrial Technology Research Institute

Taiwan

Big Data and AI Research Intern

Feb 2021 - Jul 2021

- Constructed an AI application with Python to optimize supply chain management and reduce manpower
- Optimized factory logistics by using statistical models to analyze data, reducing production capacity waste by 10%

PROJECTS

Natural Language Processing with Disaster Tweets

Feb 2025

- Conducted Natural Language Process (NLP) model using LSTM and BERT in TensorFlow, achieving 84.1% accuracy to determine the authenticity of disaster-related tweets

Restaurant Search Website

Dec 2024

- Created a restaurant search website with **React** for the frontend, implemented **RESTful** APIs with **Azure Functions** for **serverless** architecture; Implemented **NoSQL** database using **MongoDB** to enable efficient geolocation queries
- Managed with **GitLab** in an Agile environment, implementing **unit tests** and **CI/CD** to ensure quality and reliability

Data Analysis for Airbnb

Dec 2024

- Applied data mining technique and visualization with **Matplotlib**; interpreted data and provided insights for Airbnb
- Designed a **Gradient Boosting model** to predict occupancy rates for host, achieving an accuracy of 98.45% (R^2)