

# Shih-Yu (Zoe) Wang

(765) 413-1661

[zoewang1379@gmail.com](mailto:zoewang1379@gmail.com)

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

---

## EDUCATION

### Purdue University

*Masters - Business Analytics and Information Management*

**West Lafayette, IN**

Aug 2024 – Aug 2025

### National Cheng Chi University (NCCU)

*Masters - Management Information System*

**Taipei, 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, Spring boot, Docker/K8s, MongoDB, MySQL, DB2, AWS, Azure, Tableau, Microservices

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

---

## WORK EXPERIENCE

### IBM

**Taipei, 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

### ATS Lab

**Taipei, 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

**Taipei, 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

**Hsinchu, 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% ( $R^2$ )