# Marx Yeh, You-Ming

Software Engineer

ightharpoonup b10705052@ntu.edu.tw

✓ vm911216@gmail.com

**■** @ym911216

ACADEMICS

# •National Taiwan University

July 2021-Present

**○** YouMingYeh **→** +886 976343024

Taiwan

Information Management

GPA: 4.26 (Last Semester)

Key Courses: Text Mining, Data Mining, Machine Learning, Deep Learning, Computer Vision, Web Programming, Operation Research, Social Media Analysis, Entrepreneurship, etc

#### •C.P. Wei's Lab and H.W. Lee's Lab

June 2024-Present

Research Assistant

Research Topics: Social Media Analysis, Deep Learning, Epidemic Modeling, Social Science, Complex System, etc

#### EXPERIENCE

#### •Chunghwa Telecom Laboratories (Work)

UI/UX, Frontend, Backend, Database, Devops

Full Stack Developer Intern

Jul. 2023 - Aug. 2023

- Developed a backend system from scratch for dining restaurants, managing reservations data for 100+ branches and processing thousands of data entries.
- Integrated modern UI/UX, DevOps, and full-stack technologies.

### •PDOGS Judge (School)

Docker, GitLab CI/CD, Jenkins, Nomad

DevOps Developer

Jul. 2023 - Aug. 2023

- Utilized DevOps tools (Docker, GitLab CI/CD, Jenkins) and designed CI/CD pipelines for PDOGS, a school judging system, enhancing deployment efficiency and reliability.
- Designed the Backend and the Judge Core CI/CD pipeline for PDOGS, and used Nomad to orchestrate the deployment.

### •NTU ArtFest Riddle City Project Manager and Developer (Other)

Next.js, PostgreSQL, SupaBase, SEO

Full-Stack Developer and Project Manager

Feb. 2024 - Mar. 2024

- Developed a customized interactive game platform using Next.js, and PostgreSQL.
- Received over 300+ players within a week

# Works

•Portfolio Website Sep. 2024

A personal portfolio website. Link

#### Production Scheduling Optimization

June. 2024

Utilizing Operations Research to optimize the company's production schedules. Link

- Developed a production scheduling optimization system using Python and Gurobi, which significantly improved the company's production efficiency and expected to save over millions of dollars.
- Formulated the problem as a MILP model and implemented the Gurobi model, heuristic algorithms, and a comprehensive system for company as deliverables.

#### •LLM Agents Enhanced INFEKTA

An agent-based epidemic model combines the transmission dynamics of an infectious disease with agents in a complex network, enhanced

- Enhanced the INFEKTA model by integrating an LLM-based cognitive framework, enabling agents in the epidemic model to learn and adapt to their environment.
- Researched psychologically validated cognitive models and implemented an LLM system with memory streams and reflection mechanisms, resulting in more realistic agent behavior.

# Vision Model on Social Media Analysis

Jan. 2024

A vision model for social media post to enhance image feature extraction.

- Proposed a Multimodal approach (Small Language Model) to enhance the feature extraction of social media posts (images).
- Conducted Research and implemented the model using Pytorch, successfully improving the feature extraction accuracy of the social media post.

# TECHNICAL SKILLS AND INTERESTS

Frameworks: Pytorch, Next.js, FastAPI, React, Hono, LangChain, iOS, DSPy

Tools: Docker, GitLab, Kubernetes, Nomad, Gurobi, Figma, Unity, Selenium, Azure, GCP, AWS

Coding Languages: C, C++, C#, Python, TypeScript, R, SQL Soft Skills: Entrepreneurship, System thinking and Design thinking

**Areas of Interest**: Writing Technical Blogs