Chen Guan Xuan





To Brief self-introduction

I am a graduate student currently studying at National Tsing Hua University Department of Computer Science. I have finished my compulsory service in the Army of the Republic of China (Taiwan) and currently looking for a software engineering job. I have accumulated a basic knowledge of computer science through courses, projects and internship during my undergraduate and graduate studies. The area that I interested in computer science is developing efficient software system and integrating machine learning to help overcoming any specific problems that exists in our real life.

Education

National Tsing Hua University

M.S. Computer Science

National Chung Hsing University

B.S Computer Science

September 2023 - July 2025

Hsinchu, Taiwan

September 2018 – July 2022

July 2024 - September 2024

Taichung, Taiwan

Hsinchu, Taiwan

Work Experience

Silicon Motion

Firmware Engineer Intern

- Develop and maintain FTL simulator script builder
- > Learning UFS protocol
- ➤ Assist to create PTL error handling scripts

ASML July 2022 - September 2022 Tainan, Taiwan

- Software Engineer Intern
- Assist software automation group develop BDD(Behavior-Driven Development) environment

> Using python to write testing and automation program helping RD to find Software bug

- ➤ Learn skills like Sourcetree(git), Testcomplete, VDI, Python

Research Experience

Software Engineering Laboratory

lab member

September 2023 – July 2025 Hsinchu, Taiwan

- ➤ Department of Computer Science, National Tsing Hua University
- > Research topics such as software testing, code clone detection, commit message generation
- > Set up and maintain the laboratory's deep learning server

Publications

Applying Structured Code Diff Representation and Sequential Hybrid Retrieval to **Enhance LLM-Based Commit Message Generation**

2025

- ➤ Taiwan Conference on Software Engineering (TCSE 2025)
- > Conference website: https://tcse2025.seat.org.tw/

Other Experience

National Tsing Hua University

Teaching Assistant

January 2024 – July 2024 Hsinchu, Taiwan

- > software engineering courses at National Tsing Hua University Department of Computer Science in 2024.
- ➤ Main task is designing assignments and assisting professors.
- ➤ Learn skills like Turnitin, Unit testing, Integration testing, CI/CD, Scrum

A Projects

ollamacommit

- ➤ ollamacommit is a command-line tool that enhances Git workflows by generating AI-driven commit messages. Using the locally hosted Ollama model, it analyzes code changes and provides concise, context-aware commit messages
- ➤ Automatically generates precise commit messages from Git diffs by leveraging Ollama's open source model hosted locally on localhost, providing on-demand and private AI support with a streamlined, hands-off setup that installs all required dependencies and model files.
- ▶ https://github.com/jemmy9211/ollamacommit.git

WeatherVue

- ➤ WeatherVue is a web application that integrates with the public API provided by the Central Weather Bureau of the Republic of China (Taiwan). Utilizing the data offered by this API, the application employs advanced visualization techniques to enhance the accessibility of complex weather data for users. The project leverages Vue, Bootstrap, and Leaflet technologies, facilitating the rapid and practical development of the web interface.
- > Project Link: https://jemmy9211.github.io/WeatherVue/

☆ Course

Relevant Courses from September 2018 to July 2024

- * Algorithm (A)
- * Advanced Compiler (A)
- * Computer Organization (A)
- * Formal Language (A-)
- * Computer Programming (A+)
- * Object-oriented Programming (A+)
- * Digital Image Processing (A)
- * Software Reliability and Testing (A+)
- * Linux Kernel (A+)
- * Data Science (A)
- * Parallel Programming (A-)

Club

NCHU Tennis Team Tfics Programming Club

Skills

Programming Language C/C++, Python, JavaScript
Framework Vue, Django, Flask
Sport Tennis, Swimming
Talents Violin