

YuJia Liang

+886 965 160 695 | ch993115@gmail.com | [LinkedIn Profile](#) | [GitHub Profile](#) | Taipei, Taiwan

EDUCATION

National Taiwan Ocean University

Keelung, Taiwan

B.S. in Computer Science and Engineering - GPA: 3.5/4.0

Sep. 2022 – Present (EST. May 2026))

Relevant Courses: Data Structures, Algorithms, Operating Systems, Computer Networks, Database Systems, Digital Logic, Computer Organization, Information Security, Introduction to AI, Web Programming, Java, Python, Verilog, SwiftUI, Graph Algorithms, Discrete Mathematics

RESEARCH & PROJECTS

Volleyball Line Judging System

Nov. 2024 – present

OpenCV, Python — Advisor: Prof. Pei-Yi, Ding

NTOU CSE

- Designed an automated in/out detection system for volleyball using OpenCV and image classification.
- Captured and processed real-time court imagery to identify ball boundaries and improve officiating accuracy.

ASL Hand Gesture Recognition App

Dec. 2024 – Feb. 2025

SwiftUI, CreateML

- Trained a custom machine learning model to classify 28 hand gestures (A-Z, Space, Delete) using CreateML.
- Integrated real-time camera input into a SwiftUI iOS app to enable sentence construction from gestures.
- Designed a user-friendly interface for accessibility in communication.
- WWDC2025 Submission

School Course Selection Web System

Dec. 2024 – Jan. 2025

PHP, MySQL

Team size: 3

- Developed a role-based course selection platform with secure login and selection validation.
- Implemented admin-side class management and backend database integration.

College Weather Info App

March 2024 – June 2024

Java

Team size: 2

- Built a desktop application using Java Swing and Taiwan Open Data APIs.
- Enabled college search, real-time weather updates, and user subscription management.

Japanese Learning Web App

Nov. 2023 – Jan. 2024

EJC, Javascript, CSS

Team size: 2

- Created an interactive language learning platform focused on Japanese vocabulary and kanji.
- Designed intuitive navigation and responsive layout to enhance learning experience.

TECHNICAL SKILLS

Programming Languages: C++, Java, Python, JavaScript, HTML, SQL, MATLAB, Verilog, SwiftUI, PHP

Tools: Git, VS Code, Jupyter Notebook, Firebase

Frameworks: React, Bootstrap

Languages: English (Fluent), Mandarin (Fluent), Japanese (JLPT N3)

EXTRACURRICULAR ACTIVITIES

National Taiwan Ocean University Tennis Team Member

2022 - 2023

Keelung, Taiwan

Volleyball Department Team Member

2022 - 2023

Keelung, Taiwan

Hackathon Participant

2024