

# CHI-WEI HU

CA, USA | (626) 494-6280 | [cj6fu6jo25@gmail.com](mailto:cj6fu6jo25@gmail.com) | [LinkedIn](#)

## EDUCATION

### University of Southern California (USC)

MS in computer science

LA, United States | September 2024-Present

### National Taiwan University (NTU)

MS in Biochemistry

Taipei, Taiwan | September 2020-July 2022

- Thesis: Engineering of A Multi-cell Type Immunotherapy leveraging synNotch-driven Macrophages
- GPA: 3.88/4.3

### National Cheng Kung University (NCKU)

BA in Life Science

Tainan, Taiwan | September 2017-July 2020

## CS-related Coursework

Udemy | 2024

- Web Development bootcamp

NCKU | 2023

- Data Structure; Artificial Intelligence

NCKU | 2017-2020

- Introduction to Bioinformatics; Introduction and Practice of Databases (PHP, MySQL); Calculus; Biostatistics

## PROFESSIONAL EXPERIENCE

### Software Engineer, Department of Computer-Integrated Manufacturing (CIM)

Strong Electro-Mechanical Co., Ltd, Tainan, Taiwan

Tainan, Taiwan | September 2022-May 2024

- Developed a Standalone Automation Process for etching machines in panel factory in **C#**, utilizing **SEMI Equipment Communication Standard (SECS) protocol** for device communication and improving process efficiency by 20%
- Established a monitoring system for the exposure machine in a panel factory in **C++**, facilitating communication with **Arduino** or DAQ devices and database integration in **MySQL** reducing downtime by 15%

### Intern, Department of Computer-Integrated Manufacturing (CIM)

Strong Electro-Mechanical Co., Ltd, Tainan, Taiwan

Tainan, Taiwan | July 2018-August 2018

- Gained experience in the development of a weighing software system for large-scale vehicles in **C++**, integrating data with **MySQL**

## ACADEMIC PROJECTS

### Personal Portfolio Website | Independent Project [\(Link\)](#) [\(Github\)](#)

- Built a personal portfolio website designed with **HTML** and **CSS**, deploying **flask** in python as backend and **MongoDB** as database to store information

### Movie Check Mobile App | Independent Project [\(Link\)](#)

- Built a customized movie tracking app designed with **SwiftUI**, handling the API to fetch the latest information and media content of TV shows, and using **JavaScript** to connect to **MySQL** database for storing and tracking viewing habits

## SKILLS

Languages: C#, C++, Python, Java

Tools: MySQL, MongoDB, RS-232/RS-485 Communication protocol, SEMI Equipment Communication Standard (SECS)

Communication protocol, HTML, css, SwiftUI

Framework: Express.js, Flask

## RESEARCH EXPERIENCE

### Master Student, Institute of Biochemistry | Advisor: Steven Lin

Academia Sinica, Taipei Taiwan

Taipei, Taiwan | April 2020-June 2022

- Utilized **Lenti-transfection** to introduce the synNotch tool into various immune cell types, thoroughly assessing its functionality via **flow cytometry** for over 50% expression efficiency
- Conducted **Ni-NTA protein purification** for cytotoxic antibodies and verified for 20% cytotoxic ability against solid tumors by **ADCC cytotoxicity assay**

### Research Intern, Institute of Biochemistry | Advisor: Steven Lin

Academia Sinica, Taipei, Taiwan

Taipei, Taiwan | July 2019-August 2019

- Developed usable **CRISPR** gene editing tools targeting mitochondrial DNA