

Sheng-Wei Chiu

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Education

Boston University *Boston, MA*

Sep.2024 – Jan. 2026

MS in Computer Information Systems

Coursework: Data Science with Python, Information Structures with Python, Analysis of Algorithms, Foundations of Analytics, Financial Analytics, Agile Software Development, Information Systems Analysis & Design, Database Design & Implementation, Business Data Communications & Networks, Enterprise Cybersecurity Management, IT Strategy and Management

National Changhua University of Education *Changhua, Taiwan*

Sep.2020 – Jun. 2023

BS in Computer Science

Coursework: Data Structures, Algorithms, Operating Systems, Computer Organization, Computer Networks, Digital Logic & Digital Systems, Advanced Programming, Internet Database Programming, Computer Vision, Expert Systems, Microprocessors & Programmable Logic Design

University of Massachusetts Boston (UMASS) *Boston, MA*

Sep.2018 – May. 2020

BS in Computer Science

Work Experience

National Changhua University of Education *Taiwan*

Feb 2021 - June 2021

Teaching Assistant

- Provided additional support for teacher and lessons
- Assisted teacher with attendance, grading, and other administrative tasks
- Assisted classroom instruction and provided guidance to students

Technical Skills

Programming Languages: Python, C++, Java, R, JavaScript, HTML, CSS, Verilog

Tools & Frameworks: NumPy, Pandas, Scikit-learn, Matplotlib, jQuery, Jira, Git, GCP, GitHub, Figma, Angular, Solid Edge, Microsoft Office

Databases: MySQL, PostgreSQL

Language: English(TOEFL 87), Mandarin(Native), Japanese

Projects

Generative AI Model Training & Optimization — Personal Project | PyTorch, CUDA, Selenium

Oct. 2025

- Engineered an automated ETL pipeline to scrape and process unstructured image data, implementing RGBA-to-RGB normalization and semantic auto-labeling to create a high-quality training dataset.
- Fine-tuned a high-fidelity LoRA model on NVIDIA RTX 5090 using fp16 mixed precision, optimizing VRAM usage for efficient training.
- Resolved Blackwell architecture compatibility issues and deployed the trained LoRA as a compact safetensors module for prompt-controlled image generation.

Discord Game & Economy Bot — Personal Project | Node.js, Angular, SQLite, GCP

Sep. 2024

- Built an event-driven backend application using Node.js and discord.js, implementing modular command handlers, interactive button-based workflows, and asynchronous game logic for multiplayer features.
- Designed and maintained a relational SQLite database, developing a financial transaction system with lending, dynamic interest calculation, debt collection, and balance tracking while handling concurrent updates safely.
- Deployed and maintained the bot on Google Cloud Platform (GCP), configuring the runtime environment, ensuring persistent database storage, and managing production stability.

Fitness Action Comparison System — Team Project | Python, OpenCV, MediaPipe, NumPy

Sep.2020 – Jun. 2023

Topic: Fitness action comparison system based on posture detection

- Developed a real-time computer vision system using MediaPipe and OpenCV to capture and analyze user skeletal keypoints for movement correction.
- Implemented geometric feature engineering using NumPy to calculate angular differences of joints via trigonometric functions, converting raw coordinates into actionable metrics.
- Designed a weighted scoring algorithm to quantify movement similarity and utilized Matplotlib to visualize accuracy trends, providing users with data-driven feedback on their performance.

Honors

Undergraduate Research Contest- 3RD PLACE

Jun. 2023

In the Undergraduate Research Contest featuring 11 teams, our project secured third place, judged and rated by a panel of professors from three colleges.