

Kuan-Cheng (James) Ku

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Education

- National Taiwan University** *Bachelor in Information Management* 2021 – 2025
- Overall GPA: 3.88, CS-related Elective GPA: 4.11; Key Courses: Web Programming, Applied Deep Learning, Introduction to Information Retrieval and Text Mining, Cloud Native Application Development, Systems Analysis and Design
 - Teaching Assistant: Assisted in preparing materials & exams and hosted TA sessions, serving 500+ students across 5 courses, including Web Programming, Data Structures, Systems Analysis & Design, Calculus and Marketing Management.
 - Lecturer: Worked for Information Clubs of Taipei Municipal Zhongshan Girls & Datong High School and [Sprout from NTU CSIE](#), creating materials and delivering lectures in C++ & Python Programming for over 3 years.

Experience

- Research Development Intern, Microsoft** *TSMC OnePlatform Team, ISD* Apr 2025 – Present
- Led unit and end-to-end testing initiatives by designing and executing comprehensive test plans with 400+ ADO test cases, enabling early issue detection. Opened and helped resolve 150+ ADO bugs, built POC experiments for frontend bug analysis, and organized interlock meetings with MS, ASUS, and ADV to accelerate cross-vendor bug resolution.
 - Produced LaTeX-based user manuals, integrating materials from ASUS and ADV, and hosted training sessions for TSMC users, reducing onboarding friction and helping drive the project from development into the validation phase.

Achievements

- TSMC IT CareerHack 2024: 2nd Place** [🔗](#) [📧](#) deVopSCode Feb 2025
- Developed an AI maintenance toolkit, including web and VSCode interfaces, using Vertex AI, FastAPI, LangChain, and deployed on GCE and GKE within two days. Selected as one of 24 finalists from 168 teams and achieved second place.
- Taiwan Digital Innovation Awards 2025: Honorable Mention** [🔗](#) [📧](#) RenderResume Jun 2025 - Oct 2025
- Developed an AI resume editor featuring evaluation, STAR restructuring, and intelligent Q&A optimization using OpenAI API, Next.js, and Supabase. Selected as one of 14 finalists from 100+ teams and received Honorable Mention (Top 7).

Projects

- One-Click Outfit** [🔗](#) [📧](#) rmmfj/outfit-recommendation-app Jan 2024 – Jan 2025
- Architected and led fullstack development of an AI-driven platform that provides personalized fashion recommendations with Next.js and Flask, achieving a successful product launch with 300+ users within 2 weeks, deploying a Docker-based system on a VPS, and reducing processing time by 70% by migrating no-sql database to PostgreSQL and vector indexing.
- NCHU Buddy Program Dashboard** Apr 2025 - Sep 2025
- Solely architected and developed a full-stack student management platform, with Next.js, Supabase and Google Cloud API, serving 300+ MAU from NCHU, featuring task management, dynamic forms, real-time analytics, email notifications, and Google Drive file management, with a comprehensive RBAC system ensuring full data isolation and compliance.
- SARS: Social Advertising Recommendation System** [🔗](#) Nov 2023 – Jan 2024
- Built an advertisement recommendation retrieval system by computing comment trustworthiness with a BERT-based model, constructing user subgraphs via Dijkstra's algorithm, and integrating parameters optimized through backtesting.
- StreamBench Agent: Continuous Improvement of LLM** Oct 2024 – Dec 2024
- Engineered NeurIPS 2024 StreamBench-inspired prompt optimization pipeline for medical diagnosis, boosting accuracy from 50.17% to 73.64% via clinical framing, structured reasoning, and negative example learning.

Leadership and Activities

- Director, NTU Information Management Student Association** *IT Department* Jun 2022 – Jan 2024
- Co-founder, NTUIM Competitive Programming Team** Jan 2022 – Jun 2023
- Chief Organizer, 2023 NTUIM Programming Contest: PDAO** Dec 2022 – May 2023
- Deputy Organizer, 2024 NTUIM Camp: Information Fog** Jun 2023 – Jan 2024
- Dev Lead, NTU Art Festival 2024** *Riddle City Treasure Hunt Team* [📧](#) Website Jan 2024 – Jun 2024

Skills and Languages

- Languages:** Python, C/C++, HTML5, CSS3, JavaScript, TypeScript, SQL **Chinese:** Native
- Frameworks:** Express, React, Next, Tailwind, LangChain, Pytorch, Flask, FastAPI **English:** Fluent
- Tools:** Git, Docker, GCP, Vercel, Cloudflare, Azure DevOps, Supabase, MongoDB, Playwright TOEIC 950