

Hsin-Ling (Justin) Hsu

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Education

National Chengchi University (NCCU)

Expected Graduation: Jun. 2027

B.S. in Management Information Systems (MIS) and Computer Science (CS)

Taipei, Taiwan

- **Rank: 2 / 38 | GPA: 4.3 / 4.3**
- Previously enrolled in Mathematical Sciences (Sept. 2023 – Aug. 2024), and have since continued collaborating with Prof. Jengnan Tzeng from the department on research projects [2] and [3].

Research Interests

Information Retrieval; AI for Healthcare; Large Language Models; Natural Language Processing

Publications & On-Going Work

[1] **Hsin-Ling Hsu***, Cong-Tinh Dao*, et al., "MedPlan: A Two-Stage RAG-Based System for Personalized Medical Plan Generation." Accepted to **ACL 2025 Industry Track** (Best international conference in NLP, ~25.1% acceptance rate, Avg. Rating: 7.00 [6–8]), Vienna, Austria, 2025. ([paper link](#)) ([GitHub link](#))

[2] **Hsin-Ling Hsu**, Ping-Sheng Lin, Jing-Di Lin, and Jengnan Tzeng, "KAP: MLLM-assisted OCR Text Enhancement for Hybrid Retrieval in Chinese Non-Narrative Documents." Accepted to the AI CUP Workshop @ NTCIR-18, in Proceedings of the 18th **NTCIR** Conference (One of the top 3 global IR evaluation conferences, indexed by DBLP), Tokyo, Japan, 2025. **[Oral Presentation]** ([paper link](#)) ([GitHub link](#))

[3] **Hsin-Ling Hsu** and Jengnan Tzeng, "DAT: Dynamic Alpha Tuning for Hybrid Retrieval in Retrieval-Augmented Generation." **Under Review**, 2025. ([paper link](#))

Work Experience

Research Assistant

Dec. 2024 – Present

Far Eastern Memorial Hospital (Advisor: Dr. Fang-Ming Hung)

New Taipei, Taiwan

- [1] Research on disease prediction, medical plan generation, and epileptogenic zone localization using LLMs, CLIP, CNNs, knowledge graphs, and retrieval methods. Models are trained on EHRs and SOAP notes from various clinical departments.

AI Intern

Sept. 2024 – Jun. 2025

GoFreight (The world's largest cloud-based freight forwarding software)

Taipei, Taiwan

- Leveraged MLLM parallelization techniques to extract logistics data (e.g., MBL, invoices) via OCR and NLP, reducing processing time by ~78% (from 45s to 10s) while maintaining high accuracy in bounding box annotation and text-to-image mapping.
- Built LLM-based web parsers to reduce crawler maintenance under dynamic websites.
- Presented research on LLM Agents and business use cases to support AI strategy.

Research Assistant

May 2024 – Present

Institute of Information Science, Academia Sinica (Advisor: Prof. Ti-Rong Wu)

Taipei, Taiwan

- Based in the Reinforcement Learning and Games Lab to support research on game-solving strategies for variant Go games.
- Focused on "Kill-all Go" to design a scalable solution tree storage architecture and propose a visualization framework addressing the lack of standardized representations.
- Developed a modular system combining C++/WGo.js to support distributed storage, interactive tree navigation, and AI-informed decision path analysis.

Part-time AI Engineer

Jul. 2023 – Sept. 2024

ChainSea Information Group

Taipei, Taiwan

- Core R&D contributor to LLM and Whisper projects, focused on transcription, inference acceleration, and LoRA-based model tuning.
- Built RAG pipelines to enhance knowledge retrieval; developed LLM Agent for addiction counseling using structured dialogue planning.

National Competitions

2nd Place in HOTAI MaaS Hackathon, [2/233 teams; ~0.8%]

2024

AI Travel Itinerary Health Check. News Article | Certificate

Taiwan

- Led system design and full-stack AI dev; won **NT\$250,000** prize.
- Tech: Vue.js, Hybrid RAG, Cross-Encoder, collaborative filtering.

3rd Place in LINE FRESH Campus Competition, [3/165 teams; ~1.8%]

2024

AI dementia care platform. News Article | Certificate

Taiwan

- Built backend, health tracking, and multilingual chatbot with LLMs.
- Tech: RAG, LINE Messaging API, data synthesis, auto-reporting.