Hsin-Ling (Justin) Hsu

Google Scholar: Hsin-Ling Hsu
GitHub: JustinHsu1019
LinkedIn: justinhsu101999

justin-code.com
justin.hsu.1019@gmail.com

Education

National Chengchi University (NCCU) Sep. 2023 – Expected Graduation: Jun. 2027
B.S. Double Major in MIS and Computer Science *Taipei, Taiwan*

- Rank: 6 / 74 [~8%] | GPA: 4.25 / 4.30
- Honors: Beta Gamma Sigma Honor Society member (Cumulative GPA ranked in the top 10% of the department).

Research Interests

Trustworthy VLM/LLM; AI for Healthcare.

Publications & On-Going Work

Total citations: 41; h-index: 2; i10-index: 2 (Google Scholar, Feb. 2026)

[1] **Hsin-Ling Hsu***, Cong-Tinh Dao*, et al., *"MedPlan: A Two-Stage RAG-Based System for Personalized Medical Plan Generation." Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (**ACL** 2025): Industry Track*, Vienna, Austria, 2025. *(Citations: 31)* *(paper link)*
Notes: ∼**25.6%** acceptance rate, Avg. Rating: 7.00 (Scores: 6, 7, 8).

[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." Proceedings of the FinTech in AI CUP Special Session, 18th **NTCIR** Conference*, Tokyo, Japan, 2025. *(paper link)* *(GitHub link)*
Notes: One of the top 3 global IR evaluation conferences. [Oral Presentation] | Awarded the National Excellence Prize ("Qian Biao") at AI CUP 2024.

[3] **Hsin-Ling Hsu** and Jengnan Tzeng, *"DAT: Dynamic Alpha Tuning for Hybrid Retrieval in Retrieval-Augmented Generation."* arXiv, 2025. *(Citations: 10)* *(paper link)*

[4] Chia-Hsuan Hsu, Jun-En Ding, **Hsin-Ling Hsu**, et al., *"RPRO: Ranked Preference Reinforcement Optimization for Enhancing Medical QA and Diagnostic Reasoning." NeurIPS 2025 Workshop on GenAI for Health*, San Diego, California, USA, 2025. *(paper link)*

[5] Chia-Hsuan Hsu, Jun-En Ding, **Hsin-Ling Hsu**, et al., *"RGPO: Ranking-Guided Preference Optimization for Reliable Clinical Reasoning." Submitted to IEEE TAI*, 2025. *(paper link)*

Patents

- ROC Utility Model Patent, No. 114209930 (First Inventor)

Work Experience

Remote Research Intern Nov. 2025 – Present
FLAIR Lab, CSE, Texas A&M University (Advisor: Prof. Kuan-Hao Huang) *Remote*

- Research on vision-language alignment and interpretability in vision-language models, focusing on understanding and analyzing cross-modal representations and model behaviors.

Research Assistant Dec. 2024 – Present
AI Research Team, Far Eastern Memorial Hospital (Advisor: Dr. Fang-Ming Hung) *New Taipei, Taiwan*

- [1] [4] [5] Conduct research on explainable clinical decision support systems, focusing on disease prediction and medical plan generation through the integration of VLMs/LLMs, reinforcement learning, knowledge graphs, and retrieval.

AI Intern Sep. 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 **~67%** (from 45s to 15s) while maintaining high accuracy in bounding box annotation and text-to-image mapping.
- Built LLM-based web parsers with up to **97%** accuracy, significantly reducing crawler maintenance for dynamic websites.
- Presented research on LLM Agents and business use cases to support AI strategy.

AI Engineer (Part-Time) Jul. 2023 – Sep. 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.

Talks

- 2025 “MedPlan: A Two-Stage RAG-Based System for Personalized Medical Plan Generation,” ACL 2025 Industry Track (online).
- 2025 “KAP: MLLM-assisted OCR Text Enhancement for Hybrid Retrieval in Chinese Non-Narrative Documents,” FinTech in AI CUP Special Session at NTCIR-18 Conference, Tokyo, Japan.
- 2023 “Google Cloud Study Jam: Generative AI,” Google Developer Group at NCCU, Taipei, Taiwan.
- 2023 “Introduction to Databases,” Google Developer Group at NCCU, Taipei, Taiwan.

Selected Competitions & Honors

Enterprise-Level 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: React.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.

National-Level Awards

22nd National Innovation Award, Smart Healthcare Group 2025
Project: "MedPlan: A Two-Stage RAG-Based System for Personalized Medical Plan Generation." Paper Link | News Article *Taiwan*

- Co-participating with Far Eastern Memorial Hospital (Vice President, Department Directors, PhD students).
- First Inventor of a patent: *“Electronic device for generating personalized assessment content and treatment plan”*.
- Industry: MOU signed with clinics / system vendors.
- Deployment: in clinical trial/implementation phase at hospital.

Competitive Programming

Collegiate Programming Examination (CPE) — Professional Level (A), Top 4.6% nationally (Ranked 113/2481) 2025
Organized by the Association of Taiwan Computer Programming Contest (formerly ACM-ICPC Taiwan Council) *Taiwan*

- Standardized programming exam inspired by ICPC-style problems, evaluating algorithmic reasoning, data structure design, and implementation efficiency.

Selected Projects

AutoMouser 2025
*Received **300+** GitHub Stars and **30+** forks. | Pull requests | Issues*

- AutoMouser leverages LLM-based technology to automatically generate browser automation code from your mouse movements, capturing every click, drag, and hover. This integration streamlines your workflow and enables the creation of robust, repeatable tests with enhanced precision and flexibility.
- Served as a **core contributor** (ranked #2 on the contribution leaderboard), driving new feature development, bug resolution, and architecture optimization across the codebase.

Skills

Python, C/C++, PyTorch, Unsloth, Transformers, Flask, Langfuse, SQL, Linux, GCP, Docker, Git, HTML/CSS/JS