

CHUN-JU TAO

(646) 894-7186 • ct3354@nyu.edu • github.com/iridiumtao • iridiumtao.github.io

EDUCATION

New York University, New York, NY May 2026
MS in Computer Engineering, GPA 3.83
Relevant Coursework: Human Computer Interaction, Machine Learning, MLOps, Reinforcement Learning

National Taichung University of Science and Technology (NTCUST), Taichung, Taiwan June 2023
BEng in Computer Science and Information Engineering (CSIE), GPA 3.79
Relevant Coursework: Software Engineering, Electronic Commerce Security, Algorithms, Data Structures

SKILLS

Languages: Python, JavaScript (React, Vue), Go, Java, C#, Swift, MS SQL, PostgreSQL, C
Computer Software and OS: Docker, AWS ECS, Git, GitHub Actions, Terraform, PyCharm, macOS, Linux

PROFESSIONAL EXPERIENCE

Data Science Intern, **Micron Technology**, Taoyuan, Taiwan July 2025 - August 2025

- Designed a production-scale Python pipeline and Streamlit web app for fab-dispatch analysis, processing 2 weeks' logs (33GB) and delivering a self-serve interface for parameter tuning and rich visuals, enabling fast, reproducible studies and broad cross-team adoption.
- Built an explainable LightGBM simulation proxy with SHAP analysis for lot-level decision tracing, enabling evidence-based simplification of scheduling parameters by quantifying which factors truly drive selection and reducing tuning overhead for production engineers.
- Built repo-documentation tools across enterprise applications with over one million lines of code using Prompt Engineering with Roo Code Orchestrator, MCP, and Qdrant; produced modular docs and standardized class/method summaries; cut token usage 10x and expected ~3x developer efficiency.

Software Developer, **CARITY AI**, Ontario, Canada May 2024 - August 2024

- Containerized 4 microservices of an existing LLM pipeline product and automated CI/CD with GitHub Actions on AWS ECS, reducing infrastructure costs by 40% and deployment time by 70%.
- Conducted research in implementing Agentic RAG with LlamaIndex, cutting token usage 5x, boosting model efficiency, lowering costs, and enabling complex question-answering.

Software Engineering Intern, **MoBagel**, Taichung, Taiwan January 2023 - July 2023

- Collaborated with an existing team to develop a full-stack material management system for the government-owned Taiwan Water Corporation, automating budgeting and inventory of assets worth trillions.
- Established GitFlow and an Agile-like development model for a 10-person team, fostering a culture of collaboration that improved development efficiency and stabilized team management during a 300% expansion.

Software Engineering Intern, **Mindtronic AI**, Taipei, Taiwan June 2022 - September 2022

- Developed a full-stack system for an in-vehicle driving analysis product; designed and engineered RESTful APIs and backend services using Golang, Python, and PostgreSQL to process 480,000+ weekly entries; extended a React frontend with dashboards, video streaming, and real-time vehicle tracking.

PROJECT

Taigi (Taiwanese-Hokkien) Medical Advising LLM, **New York University**, New York, NY March 2025 - May 2025
Advisor: Professor Fraida Fund

- Fine-tuned an 8B LLaMA-3.1 into the first Taigi medical advisor using 120K bilingual Q&A pairs with LoRA + mixed-precision on an A100 GPU; tracked all runs in MLflow for full reproducibility.
- Built a cloud-native MLOps stack (Terraform GPU/CPU nodes, Docker-based microservices with FastAPI/Gradio/MinIO, Prometheus/Grafana) and developed a doctor-in-the-loop retraining pipeline using Airflow and Label Studio across canary, staging, and production nodes.

HONORS

Emerging Technology Application Award in Fi-Award 2023 by **the 13th International Conference on Frontier Computing**, Tokyo, Japan 2023

Winner of Better Retail, **Level-Up Society Hackathon**, organized by ShowCode, UK 2021