Cheng-Yen Lee

Taipei, Taiwan | 2712cylee@gmail.com | +886 912248574 | https://lucien2712.github.io/
linkedin.com/in/lucien8080 | github.com/lucien2712

About

Machine learning engineer with hands-on experience in domain-specific applications and industry collaborations. Skilled in applying ML models to real-world problems and delivering reliable solutions. Seeking opportunities in Software Engineering, Machine Learning, and Firmware Development.

Education

National Taiwan University, MS in Data Science, College of Electrical Engineering and Computer Science — Sep 2024 – Present

- MIRLAB (Multimedia Information Retrieval Lab)
- GPA: 3.93/4.3
- **Courses**: Machine Learning, Information Retrieval and Extraction, Computer Vision Practice with Deep Learning, Natural Language Processing, High-Performance Big Data and Artificial Intelligence Systems, Operating System

Soochow University, BS in Data Science — Sep 2020 – June 2024

Work Experience

TSMC - AI Engineer Intern — Jul 2025 - Aug 2025

- Implemented graph-based RAG models for domain-specific applications, achieving more reliable cross-document reasoning and minimizing hallucinations compared to Regular RAG.

Projects

Collect dialysis clinical data and establish a model of chronic kidney disease — Sep 2024 - Present

- Developed an end-to-end system to predict intradialytic hypotension in dialysis patients, optimized and balanced TPR and TNR for clinical effectiveness, and deployed the model for hospital use.
- Collaborated with National Taiwan University Hospital

Revenue forecasting based on machine learning techniques — Nov 2023 - Dec 2024

- Applied ML techniques with expert forecasts for 6-month revenue prediction, achieving 1.5× performance improvement by incorporating expert input for the upcoming month.
- Collaborated with MediaTek Inc.

Publications

Establishment of an Automatic Crop Classification and Disease Detection System: Applied to Apple and Tomato Disease Detection — 2024

Journal of Advanced Technology and Management

Named Entity Recognition for Chinese Healthcare Applications — 2023

IEEE ICCE-TW 2023

Deep Learning Technology and Ensemble Modeling for Text-Based Personality Trait Detection — 2023

2023 DLT Digital Life Technology Conference

Technologies

Skills: Machine Learning, Deep Learning, Data Science, Natural Language Processing , Computer Vision

Languages: Python, C/C++