Yen-Jung, Chen

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EDUCATION

Purdue University

West Lafayette, IN

Master of Science in Computer Engineering

Expected December 2025

• Relevant Coursework: Deep Learning, Random Variables, Advanced Mathematics for Engineers and Physicists

Purdue University

West Lafayette, IN

Bachelor of Science in Computer Engineering

May 2024

• Relevant Coursework: Machine Learning, Python for Data Science, Object Oriented Programming in C++

Summary

Machine Learning Engineer & Purdue MS student with hands-on LLM fine-tuning (BLEU-4 54.6%) and computer vision pipelines (87% quality control boost).

EXPERIENCE

Ariel Premium Supply

Overland, MO

Applied AI Intern - Business Solutions

May 2025 - July 2025

- Developed a LangChain + LLM agent enabling plain-English record retrieval—reduced lookup time by 83%.
- Created logo detection app (Python, JS, GCP Vision API), accelerating QC checks by 87%.
- Applied HDBSCAN clustering (Silhouette score 0.63) to personalize order requests—improved scheduling by 12%.
- Automated cross-border invoice reporting (Python + SQL), reducing manual effort by 2+ hours per week
- Automated import/export workflows with SQL Server views and barcode scanning; cut manual entry by 96%.

Pegatron Corporation

Taipei, Taiwan

Computer Vision & MLOps Intern

June 2023 - August 2023

- Deployed PyTorch-based UNet segmentation model in production, achieving 0.61 AP, 0.51 IoU and 0.44 s/image inference latency.
- Boosted defect detection yield via prompt segmentation, and MLOps optimization.
- Developed AI Model Comparison Dashboard for benchmarking segmentation models.
- Built CI/CD-driven training-validation-deployment pipeline for real-time defect solutions.

SkyLab

West Lafayette, IN

LLM Research Assistant

December 2024 - May 2025

- Processed 843 transportation PDFs to create 5,000+ QA pairs for LLM fine-tuning.
- Automated full data pipeline: conversion, cleaning, QA formatting.
- Fine-tuned LLaMA3, DeepSeek-V3, Qwen2.5 models (7B-70B) using DeepSpeed on 4xA100 clusters.
- Achieved BLEU-4 of 54.62 and ROUGE-L of 63.06 in validation benchmarks.

Purdue University, Senior Design Project

West Lafayette, IN

AI/Robotics Project Lead

January 2024 - May 2024

- Led 2-person team to train CNN+DQN models for indoor drone navigation in AirSim.
- Trained agent for 5,000+ episodes, achieving 72.5% mission success; improved convergence via reward tuning.
- Managed agile sprints to deliver milestones on time; delivered on-time demo.

Core Competencies

Technical Skills: \bullet Python \bullet C/C++ \bullet SQL \bullet PyTorch \bullet Hugging Face \bullet LangChain \bullet DeepSpeed \bullet Pandas \bullet NumPy \bullet Matplotlib \bullet MLOps

Cloud, Infrastructure & Databases: • Google Cloud Platform • Git • GitLab CI/CD • Linux • SQL Server

Other Expertise: • Agile Development • Model Deployment • Prompt Engineering • Retrieval-Augmented Generation

• LLM Fine-Tuning • Distributed Computing