

Yuan Chang

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Educational Background

Purdue University, West Lafayette, Indiana (Full-Time)	01/2025 – 05/2026 (In Progress)
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• MSECE in Thesis Track	Current GPA: 3.66/4.00
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Purdue University, West Lafayette, Indiana (Full-Time)	08/2019 - 12/2024
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• BSECE	Cumulative GPA: 3.53/4.00
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Related Course-Works

Computer Network System, Deep learning, Reinforcement Learning, Computer Security, Compiler Engineering, Intro-Digital System Design, OS X86, Embedded System, Signal Processing, Math & Stats & Probability, Formal Methods

Skills

Coding/Skills

• C#, Python, MATLAB, TensorFlow, Py-torch, System-Verilog, Assembly-RISCV, Micro-python, SAS, Java

Software & Hardware

• VS code, Docker, Antlr, Linux, PCB, Ki-Cad, GitHub, ESP32, STM32

Research Field of Interest

• Deep Learning & RL & LLM, Computer Network System, Embedded System

Work Experiences

AI-Intern at One Stop Warehouse	05/2025 – 07/2025
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• Full-time Intern at OSW Chengdu (renewable energy resale startup, OSW Australia branch) – Developed an AI agent for PDF-reading and analysis by fine-tuning a large language model with LoRa/QLoRa. Integrated it with existing company models into a multimodal service platform, then packaged and deployed the system using Docker with server-side API access.

Master Thesis Research

RL-Enhanced LLM Reasoning (Python)	08/2025 – Current
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I am greatly honored to work with Professor Xiaoqi (Danny) Chen at Purdue Network Research Lab on my Master's Thesis

RL-Enhanced LLM Reasoning – Applying GRPO-style reinforcement learning to LLMs on interactive text games (Minesweeper, Connect-Four, 2048, Othello) to strengthen multi-step reasoning and decision-making beyond standard supervised training.

Academically Oriented Researches

Computer Network System Course Project (Python).	01/2025 – 05/2025
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• Designed and evaluated networked systems across the stack, from a Dijkstra-based SDN routing simulator and custom TCP with advanced ACK/congestion control to BBA and RobustMPC (SIGCOMM'15) reimplementation for improved video streaming QoE

Reinforcement Learning Course Project (Python)	08/2025 – 12/2025
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• Applied PPO to solve the Cart-Pole Swing-Up task in the OpenAI Gym environment, using eight parallel environments with randomized starts and mini-batch SGD updates for stable, data-efficient training. Implemented custom policy and advantage/value networks from scratch.

Team Leader in Senior Design Project (Micro-Python)

08/2024 – 12/2024

- Led a team of four to develop a daisy-chained IoT parking system using ESP32 nodes, ultrasonic sensors, and a Raspberry Pi server; designed the PCB, integrated hardware/software, and presented the project at Purdue's Spark Challenge

Honors & Awards

Dean's list & Semester Honors

Fall 2019, 2022, Spring 2021, 2022, Fall 2023 (Dean's list).

- Accomplish 12+ cumulative & 6+ semester credit hours & achieved a 3.5+ for both semester and cumulative GPA.

ECE Great Work Award (ECE General Merit Scholarships)

Fall 2023

- 1000\$ of scholarship for academic excellence in either Fall 2022 or Spring 2023

Acacia Fraternity Academic Excellence Merit Scholarship Award

Spring 2023

- 200\$ of scholarship for academic excellence in Spring 2023

ECE Summer Merit Scholarship Plus Tuition Aid

Summer 2022

- 2000\$ of scholarship plus tuition aid for summer courses

Languages

- Bilingual in both Mandarin (Native) and English (Fluent)

Leadership Experiences & Extra-curriculum

Acacia fraternity (Purdue University Chapter)

2019 – 2024

Social Risk Management Team leader

08/2022 – 05/2023

- Rushed the fraternity and had become a member since 2019.
- Led a small risk management team of 6-8 people and was responsible for risk monitoring of social events being hosted at the house once a week during the 2023 academic year.

Intramural Basketball & Soccer (Purdue University)

01/2023 – 05/2023

Intramural Sports Co-Organizer and Team Leader

- Led two teams in over eight intramural basketball and soccer knockout tournaments hosted by the university, achieving top 8 and top 16 finishes among 32 teams.
- Led the team in the university's "Moonball Tournament" - a philanthropy basketball event - and interacted with top NCAA D1 bench players.