

Wei-Yu (Jason) Chen

✉ jasperorachen@gmail.com | 📞 +1-470-549-3970 | 🏠 jasperora.github.io | 🌐 Wei-Yu Chen | 📺 Jasperora

Education

Georgia Institute of Technology 08/2025 – 12/2026

Major: MS in Computer Science

- GPA: 4.0/4.0
- Selected Courses: Distributed Computing, Advanced Operating System, Computer Vision

National Taiwan University (NTU) 09/2020 – 06/2024

Major: BSE in Electrical Engineering, Double Major: BA in Economics

- GPA: 3.97/4.0, Ranking: 8/202
- Selected Courses: Machine Learning, Computer Architecture, Advanced Algorithm

Experiences

Apache Airflow 06/2025 – 08/2025

Open Source Contributor | Python, React, JavaScript, TypeScript

Selected Contributions:

- Enhanced the user interface of Airflow through collaboration with the open-source community. (PRs: #51946, #52212, #53064).
- Introduced AwaitMessageTrigger and RedisPubSubMessageQueueProvider for Redis PubSub, enabling asynchronous and deferrable sensor support for Redis message channels to improve efficiency. (PR: #52917, #53556)

Academia Sinica

Research Assistant | C++, Python, PyTorch, AlphaZero 02/2025 – 06/2025

- Enhanced reinforcement algorithm AlphaZero's head-to-head win rate on Go and Othello by 15% through strategic selection of intermediate states as self-play starting positions.

Undergraduate Research Assistant/Intern | C++, Python, PyTorch, MuZero 07/2023 – 08/2024

- Reduced decoding MSE loss on Atari games by 30%, improving interpretability of reinforcement algorithm MuZero's hidden states.

Hybrid Robotics, UC Berkeley 06/2023 – 09/2023

Summer Research Intern | Python, LLM, Blender

- Developed an emotional and meaningful script generation system for the Unitree A1 quadruped robot using dual OpenAI API instances for self-adjustment.
- Predefined a set of skills, each with a Blender-rendered video, composing scripts from sequences of these skills.

Skills

Languages: Python, C++, JavaScript/TypeScript, SQL, Bash, Dart, MATLAB
Distributed Systems: Paxos, RAFT
ML/AI: Reinforcement Learning, PyTorch, CUDA, HuggingFace, Scikit-learn
Frameworks & Tools: Docker, Apache Airflow, React, Flutter
Platforms & DevOps: AWS, Microsoft Azure, Linux, Git, VS Code, IntelliJ

Projects

Fault-Tolerant Distributed Consensus (Multi-Paxos)

- Developed multi-PAXOS algorithm including garbage collection and log compaction.

Food Chooser

- Built an app to track users' meals, manage and rate restaurants, and provide personalized recommendations based on visit history and restaurant rating.
- Demo video: <https://youtube.com/shorts/cUgzMnEIFCc?feature=share>

Publications

[1] *Regret-Guided Search Control for Efficient Learning in AlphaZero*, ICLR 2026

[2] *Demystifying MuZero Planning: Interpreting the Learned Model*, IEEE TAI