

Chih Han Yang (Chris)

Ph.D. Student, National Taiwan University

NTU Robot Learning Lab

Robot Learning, Imitation Learning, Language-Guided Robotics

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🌐 [Personal Website](#)

🐙 [GitHub Profile](#)

🔗 [LinkedIn Profile](#)

Research Interests

Robot learning, imitation learning from suboptimal demonstrations, language-guided robot learning, reinforcement learning, generative models for embodied control, and programmatic / structured policy learning.

Education

National Taiwan University

Ph.D., NTU Robot Learning Lab

Advisor: Prof. Shao-Hua Sun

Taipei, Taiwan

Sep. 2026 – Present

National Taiwan University

M.S., NTU Robot Learning Lab

Advisor: Prof. Shao-Hua Sun

Taipei, Taiwan

Sep. 2025 – Jun. 2026

National Taiwan University

B.S., Computer Science and Information Engineering

Last 60 GPA: 4.073 / 4.3

Taipei, Taiwan

Sep. 2021 – Jun. 2025

Publications

Language-Critique Imitation Learning from Suboptimal Demonstrations

Jul. 2026

Chih-Han Yang, Dai-Jie Wu, Yun-Ping Huang, Ping-Chun Hsieh, Kenneth Marino, Shao-Hua Sun

arXiv preprint. Proposed a language-critique imitation learning framework that leverages natural language as a structured and expressive supervision signal for learning embodied control policies from suboptimal demonstrations.

Hierarchical Programmatic Option Framework

Dec. 2024

Yu-An Lin*, Chen-Tao Lee*, **Chih-Han Yang***, Guan-Ting Liu*, Shao-Hua Sun

NeurIPS 2024 Poster. Developed an interpretable reinforcement learning framework that represents high-level skills as human-readable programmatic options.

Research Experience

NTU Robot Learning Lab

Graduate Researcher

Taipei, Taiwan

Sep. 2024 – Present

- Conducted research on programmatic reinforcement learning, investigating how program code can serve as a structured and generalizable representation for control policies.
- Published our work, *Hierarchical Programmatic Option Framework*, at NeurIPS 2024.
- Worked on imitation learning from suboptimal demonstrations, focusing on richer supervision signals beyond scalar rewards or weights.
- Proposed using natural language as an expressive supervision signal for imitation learning in embodied control.
- Explored diffusion steering through high-level noise prediction with in-context reinforcement learning.

NTU Intelligent Robot Lab

Undergraduate researcher

Taipei, Taiwan

Sep. 2023 – Aug. 2024

- Worked on robot planning and decision-making with large language models.
- Explored how semantic reasoning and program structure can improve embodied control and robot task execution.

Industry Experience

Shen Nong Shih

Robot learning research intern (Part-time)

Taiwan

May 2026 – Present

- Work on AI robotics for making Chinese cuisine like real human.
- Develop and integrate real-time learning-based robotic systems for real-world culinary tasks.

NTU Racing Team / Formula SAE

Software and robotics-related systems

Sep. 2023 – Jun. 2024

- Built software for race car communication, data uploading/decoding, and NTRIP/NMEA message publishing.

- Worked on robotics and autonomous-system-related software in a team engineering environment.

Awards and Honors

- **MediaTek Research Talent Grant for International Presentations**, Oct. 2024.
- **Undergraduate Capstone Project Exhibition, Third Place and Appier Excellence Award**, National Taiwan University CSIE, Jun. 2024.

Talks

- **NTU AI-CoRE ML Top Conference Meetup** on my project Language-Critique Imitation Learning from Suboptimal Demonstrations, Jun. 2026.
- **Embodied AI Meeting, University of Utah** on my project Language-Critique Imitation Learning from Sub-optimal Demonstrations, Feb. 2026.

Technical Skills

- **Programming:** Python, C/C++, Bash.
- **Machine Learning:** PyTorch, transformers, diffusion models, reinforcement learning, imitation learning.
- **Robotics / Simulation:** Robotic operating system (ROS), Mujoco, Gymnasium.
- **Tools:** Git, Linux, Hydra, Weights & Biases.
- **Languages:** Mandarin Chinese native; English fluent, TOEFL iBT 112.

Church Life

Banner Church Youth Group

Taiwan

Sep. 2018 – Present

- Serve in youth ministry by supporting younger students in their walk with Christ.
- Saved by my Lord and Savior Jesus Christ since 2018.