LI-HENG LIN

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EDUCATION

Stanford University Stanford, CA, USA

M.S. in Computer Science 06/2024 (Expected)

- Cumulative GPA: **3.96**/4.30
- Relevant Courses: Deep Multi-Task and Meta Learning, Principles of Robot Autonomy II, Decision Making under Uncertainty, Deep Reinforcement Learning, Mining Massive Datasets

National Taiwan University (NTU) Taipei City, Taiwan

B.S. in Computer Science and Information Engineering 01/2022

- Cumulative GPA: **4.13**/4.30, Major GPA: **4.15**/ 4.30, Overall Ranking: **19/ 181 (10.5%)**
- Relevant Courses: Machine Learning, Matrix Algebra and Its Applications

RESEARCH EXPERIENCE

Stanford Intelligent and Interactive Autonomous Systems Group Stanford, CA, USA

Graduate Research Assistant, Advisor: Prof. Dorsa Sadigh 09/2022 - Present

◦ Gesture-Informed Robot Assistance [1]

- Enabled robots to understand human gestures by prompting Large Language Models.
- Implemented the whole robot system using Python and PyTorch that achieved 70% higher success rates than baseline.

NTU Computational Learning Lab Taipei City, Taiwan

Undergraduate Research Assistant, Advisors: Prof. Hsuan-Tien Lin, Dr. Chun-Liang Li 06/2020 - 01/2022

◦ Practical Guide for Deep Active Learning (DAL)

- Investigated the effect of several design choices (model initialization, loss function, hyper-parameters tuning, warm-starting/ cold-starting) in DAL through carefully designed experiments.

NTU Cyber-Physical Systems Lab Taipei City, Taiwan

Undergraduate Research Assistant, Advisors: Prof. Chung-Wei Lin, Prof. Hui-Ru Jiang 09/2019 - 01/2022

◦ Improving Robustness of Graph-based Intelligent Intersection Management System [2]

- Ensured deadlock free by proposing a protection mechanism based on limiting the number of vehicles.
- Reduced vehicle wait time by 52% on average compared to traditional traffic light systems.

SELECTED PUBLICATIONS

[1] **Li-Heng Lin**, Yuchen Cui, Yilun Hao, Fei Xia, Dorsa Sadigh, ”Gesture-Informed Robot Assistance via Foundation Models”, Conference on Robot Learning (CoRL) 2023

[2] **Li-Heng Lin**, Kuan-Chun Wang, Ying-Hua Lee, Kai-En Lin, Chung-Wei Lin, Iris Hui-Ru Jiang, ”Deadlock Resolution for Intelligent Intersection Management with Changeable Trajectories”, IEEE Intelligent Vehicles Symposium (IV) 2022

WORK EXPERIENCE

Google Inc. New Taipei City, Taiwan

Software Engineering Intern, Host: Richard Chang 06/2021 - 09/2021

◦ Braille Image Translator

- Proposed an algorithm to to translate an image of a braille device into its corresponding text using computer vision techniques.
- Empowered people to understand the context of a braille sequence in 5-10 seconds by developing an Android application.

SKILLS

- Programming Languages: Python, Java, C, C++
- Python Packages: PyTorch, Tensorflow, PySpark