

Andrew Lee

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Education

- University of California, Davis** May 2023 - Present
Ph.D. in Computer Science
Davis, CA
- Advisor: Iman Soltani, Ph.D.
- University of California, Davis** Sep 2021 - May 2023
Master of Science in Computer Science (changed degree objective to Ph.D.)
Davis, CA
- Hanyang University** Feb 2020
Bachelor of Science in Mechanical Engineering
Seoul, South Korea
- Undergraduate Thesis: Compact Motor-Driven Walk-Support Device for Reducing Muscle Load
 - Advisor: Sukkee Um, Ph.D.

Experience

- Laboratory for AI, Robotics and Automation (LARA)** Jun 2022 - Present
Graduate Student Researcher
Davis, CA
- Led multiple robotics research projects [1, 2] utilizing the *ALOHA 2* bimanual manipulation setup.
 - Contributed to several Caltrans-funded projects, including the development of an ADA ramp detection and measurement system and an Infrared Advanced Driver Assistance System (IR-ADAS) for enhanced safety in low-visibility conditions.

Publications

‡ indicates equal contribution.

- [2] Ian Chuang[‡], Andrew Lee[‡], Dechen Gao, Iman Soltani. **Active Vision Might Be All You Need: Exploring Active Vision in Bimanual Robotic Manipulation.** *International Conference on Robotics and Automation (ICRA)*. 2025.
- [1] Andrew Lee, Ian Chuang, Ling-Yuan Chen, Iman Soltani. **InterACT: Inter-dependency Aware Action Chunking with Hierarchical Attention Transformers for Bimanual Manipulation.** *Conference on Robot Learning (CoRL)*. 2024.

Projects

ADA-Ramp

Caltrans

- Developed and implemented a comprehensive ramp detection and measurement pipeline, converting large-scale raw point cloud data into accurate bounding boxes, slope calculations, and width measurements.
- Utilized Faster R-CNN for precise ADA ramp detection within the pipeline.

IR-ADAS

Caltrans

- Developed an Infrared Advanced Driver Assistance System (ADAS) to enhance safety and operational efficiency for emergency tow trucks and snowplows in low-visibility environments.
- Implemented the system on Jetson Nano Orin using TensorRT and YOLOv7, enabling real-time obstacle detection and hazard avoidance for improved situational awareness.

Awards and Honors

2024 Computer Science Graduate Group (GGCS) Summer Ph.D. Fellowship (\$18000)

May 2024