

Leo Lin

www.leo-lin.com | leo.daniel.lin@gmail.com | [linkedin.com/in/leolin6/](https://www.linkedin.com/in/leolin6/) | github.com/LeoLin6 | Cupertino, CA | 408-420-5768

EDUCATION

University of Illinois - Urbana Champaign Aug. 2023 - May 2027 (Expected)
Bachelor of Science in Computer Engineering GPA: 3.98/4.00
Awards: 1st place (x2) - NVIDIA/Lerobot hackathon; ECE Visionary Scholarship (top 8 out of 500 ECE majors)

WORK EXPERIENCE

Amazon Robotics @ Innovation Lab Westborough, MA
Software Development Engineer Co-op Jan 2026 - Present

- Developed a ROS2 pipeline to dynamically map SAM2-segmented textures onto 3D primitives in Isaac Sim
- Added a virtual gripper camera in the digital twin to improve depth perception and close-range grasping success
- Integrated Sharpa hands into Isaac Sim w/ Apple vision pro and Manus gloves w/ ROS2 and IsaacTeleop

K-Scale Labs (YC Based Robotics startup) Palo Alto, CA
Software Engineering/ML Intern July 2025 - Aug 2025

- Implemented serial and UDP protocols for Rust firmware to collect data for VLA model training
- Trained humanoid robot for manipulation tasks w/ VLM + action diffusion model
- Created Inference file to control the robot real time in Mujoco Simulator using teleoperation setup
- Finetuned Gr00t-n1.5 model for robot to break natural language commands down into specific tasks

Robnux Sunnyvale, CA
Software Engineering Intern May 2024 - Aug 2024

- Automated deployment across factory PCs w/ Docker-based synchronization between local & cloud environments
- Integrated C++ APIs with a React frontend to modernize the legacy Robnux app that used to run on PyQt

RESEARCH

SIGRobotics (ACM @ UIUC) | Co-Chair, Team-Lead | Mujoco Aug 2025 - Present

- RSS 2026 Publication: CRAFT: Tendon-Driven Hand w/ Hybrid Compliance (First Author)
- Wrote API and vision transformer based retargetting teleoperation method to control CRAFT hand and X-Arm
- Open-sourced URDF/MJCF files for the hand to validate mechanism and test out rolling contact joint design

Mechatronics and Intelligent Robotics Lab | NSF REU Research Fellow May 2025 - July 2025

- Developed real-time object and hand detection using YOLO model for safe human-robot interaction
- Integrated MoveIt motion planner w/ ROS to for Sawyer robot arm bottle grasping & human handoff
- Deployed mediapipe hand tracker to retarget LEAP hand with pinnochio
- Built a tactile sensor with shear+normal force/temperature detection to be deployed on LEAP hand

UIUC Augmented Listening Technology Lab | Research Lead | Ki Cad Jan 2024 - May 2025

- Open sourced a silent robotic turret head with smooth nod/turn using C on board an Arduino microcontroller
- Reduced mechanical noise by ~40% via UART-tuned TMC motor drivers; improved angular recentering to $\pm 0.5^\circ$

HACKATHON WINS

1st place - Sock Sorting Robot at LeRobot global hackathon | Python, Pytorch, OpenCV, CUDA, AI agent Jun 2025

- Utilized Gemini API for high level planning/reasoning to sort pairs of socks in same bins
- Built data collection pipeline w/ bounding box annotations to train deep learning models on cloud nvidia GPUs

Team Lead - NVIDIA x Huggingface x SeededStudio Hackathon | Python, Huggingface Oct 2025

- Won a Nvidia Jetson Thor for 1st place prize (matcha making robot)
- Performed fine-tuning of the Gr00t N1.5 VLA model and set up inference for our specific embodiment.
- Built public pip packages into the LeRobot library for bimanual control support for everyone

TECHNICAL SKILLS

Python, C++, C, Java, Git, CMake, Docker, Arduino, Ki-Cad, UART, ROS, Isaac Sim, Mujoco, System Verilog, NumPy, CAN, Matlab, JavaScript, Pandas, Linux/Ubuntu, Amazon Web Services (AWS), Embedded Systems, HTML, Bash Shell

Relevant Coursework: Deep Generative Models (Grad), Machine Learning, Data Structures (C++), Control Sys (Simulink & MatLab), AI, Digital Systems Lab (FPGA), Probability & Stats, Object-Oriented (Python), Linear Algebra