
EDUCATION

Carnegie Mellon University School of Computer Science - Pittsburgh, PA
Bachelor of Science in Robotics, Minor in Machine Learning

May 2028
GPA: 3.5/4.0

Relevant Coursework:

Robot Kinematics, Intro to Machine Learning, Intelligent Robot Systems, Robot Mathematics, Mathematical Foundations of Computer Science, Matrices & Linear Transformations, Intro to Feedback & Control Systems, Computer Vision, Robot Planning Techniques, Great Ideas of Theoretical Computer Science, Computer Systems

TECHNICAL SKILLS

Software: C, C++, Python, PyTorch, ROS2, Java, Kotlin, Swift, git, $\text{\LaTeX}$

Hardware: Onshape, Fusion 360, CNC fabrication, 3D printers, laser cutters

Skills: Geometric & Analytical Robotics, Control & Motion Planning, Probabilistic State Estimation, Integrated Robot Simulation (Gazebo, MuJoCo), Sensor Fusion, Distributed Robot Systems (Docker), Machine Learning, Computer Vision

EXPERIENCE

Kantor Lab @ CMU - Pittsburgh, PA

Jun 2026 - Present

Research Assistant

- Collecting and curating field datasets used to train machine learning models for automatic grape-cluster harvesting.
- Supporting agricultural robotics research by capturing real-world grape-cluster examples for perception and harvesting algorithms.

Momentum Robotics Lab @ CMU - Pittsburgh, PA

Jun 2025 - May 2026

Research Assistant

- Building modular teleoperation interfaces to control multiple 7-DoF robot arms from an iOS app.
- Managing distributed systems with Zenoh and Docker to enable long-range robot teleoperation.
- Prototyping control software and fail-safes in MuJoCo/Robosuite before deploying to hardware.
- Collaborating with a six-person lab team on a paper for IROS 2026.

Carnegie Mellon University - Pittsburgh, PA

Aug 2026 - Present

Teaching Assistant, 16-385 Computer Vision

- Course staff for 16-385 Computer Vision, helping students with assignments on image processing, feature detection, RANSAC, and geometric vision.
- Supporting students through office hours and feedback on programming and written coursework.

CREATE Lab @ CMU - Pittsburgh, PA

Feb 2025 - May 2025

Research Assistant

- Developed an Android UI in Jetpack Compose that reacts and responds to Bluetooth devices.
 - Refactored Kotlin apps that interface with children's toys over Bluetooth.
 - Deployed interfaces in Pittsburgh-area learning centers to gather user feedback.
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PROJECTS & ACTIVITIES

CMU MoonMiners (NASA Lunabotics)

Dec 2025 - Present

Software Controls Lead

- Leading software on a 80-person NASA Lunabotics team building an autonomous lunar excavation rover.
- First rookie team in Lunabotics history to score autonomous points.
- Leading 20 software members, organizing GitHub workflows and project deadlines across subteams.
- Developing simulation framework to wire ROS2 nodes from high-level planning to simulated low-level motor controllers.
- Integrating LiDAR-based SLAM for obstacle detection and autonomous navigation.

CMU RoboClub

Sep 2024 - Present

- Built simulation adapters that redirected ROS components into Gazebo for hardware-free testing.
- Created dynamic quadruped models in Gazebo to prototype control code.

Fringe

Aug 2025 - Present

- Intramural buggy team competing in CMU's tradition of racing unpowered aerodynamic cars.
- Helping host on-campus events for the broader CMU community.