

Cole Herber

(971) 274-9562 | cole.r.herber@gmail.com | [linkedin.com/in/cole-herber](https://www.linkedin.com/in/cole-herber)

OBJECTIVE

Aspiring mechanical engineer focusing on robotics, seeking an internship to apply advanced design and robotics skills in a practical environment.

EDUCATION

Carnegie Mellon University, Pittsburgh, PA | Expected May 2026
Bachelor of Science in Mechanical Engineering, Additional Major in Robotics

RELEVANT EXPERIENCE

Research Assistant, Agricultural Robotics Lab, Carnegie Mellon University, May-Dec, 2023

- Developed field robots to traverse difficult agricultural terrain while minimizing impact.
- Designed deployment packages for long-term data collection in harsh environments.

Teaching Assistant, Robotics Institute, Carnegie Mellon University, June 2024 - Present

- Assisted in two course redesigns to integrate new control hardware, enhancing the practical learning experience for students.

RELEVANT COURSEWORK

Computer Vision	Robot Kinematics and Dynamics	Introduction to Robotics,
Thermodynamics	Fluid Mechanics	Heat Transfer
Dynamics	Differential Equations	Materials Engineering

PROJECTS

Tartan Pest Competition, Spring 2023

- Participated in an undergraduate competition hosted by the American Society of Agronomy.
- Created a pest egg sack disabler, structured the robot core, and assembled essential mechanisms.

Underwater Bio-Inspired Gripper, Spring 2024

- Led a 6 person team to develop of an omnidirectional gripper for handling organic-like objects.
- Successfully produced two iterations of the device for use in underwater settings.

Underwater Torpedo Launcher, Fall 2024

- Developed a system capable of accurately launching buoyant darts over one meter underwater.

Compliant Corn Sensor Mechanism, Fall 2023

- Constructed a device for accurately inserting data collection sensors, optimizing field data retrieval.

SKILLS

Programming: Proficient in Python, MATLAB, C++, ROS, Docker, Javascript

Design: SolidWorks, Inventor, Onshape, HSM, Ansys, Illustrator

Manufacturing: Manual Mill, Manual Lathe, CNC Mill, CNC Lathe, CNC Router, 3D printing

ACTIVITIES

CMU Robosub, Mechanical Lead, CMU, August 2022 - Present

SDC Buggy, CMU, August 2022 - Present