

# Aaron Gan

[www.aarongan.dev](http://www.aarongan.dev) [aarongan01@gmail.com](mailto:aarongan01@gmail.com) 267-893-8486

## EDUCATION

### Computer Science, *University of Pittsburgh*

08/2022 – 05/2026

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Organization & Assembly, Computer Architecture, Software Quality Assurance

Pittsburgh, PA

## PROJECTS

### Controls Team Lead (3 years) | Member (1 year), *Sailbot @ Pitt*

08/2022 – present

- Developing software and electrical systems for an autonomous sailboat built on ROS2
- Mentoring members by leading workshops on Git, ROS and soldering
- Easing onboarding by deploying a documentation site built on mkdocs
- Supporting code reuse by implementing a high-level HAL (Hardware Abstraction Layer) to address our growing suite of sensors, motors, microcontrollers & PCBs
- Accelerating code development & deployment with PyTest, Docker, PlatformIO and VSCode devcontainers
- Designed event and GPS navigation autonomy, earning 3rd place in an international competition
- Earned 1st place in a search event by improving buoy detection accuracy with AI using YoloV8, OpenCV and Roboflow

## PROFESSIONAL EXPERIENCE

### Research Intern, *University of Konstanz*

06/2025 – 08/2025

- Developed a novel robotics simulator to model marine sailboat swarm behaviors
- Addressed critical gaps in simulation by implementing wind and sailing force physics

Konstanz, Germany

### Summer Tech, *Central Bucks School District*

06/2024 – 08/2024

- Supported district-wide 1:1 program by servicing, imaging and distributing over 6,200 laptops and ipads to K-12 students

### Course Assistant, *University of Pittsburgh*

12/2023 – 07/2024

- Collaborated with professors to release an online data science course to 300+ students
- Developed practice coding questions to test knowledge of Python, Pandas and NumPy
- Improved course scalability by automating code submission grading with Python & regex

### Intern, *North Star Access Consulting*

05/2023 – 09/2023

- Assisted a venture capitalist firm's financial projections of an oncology drug by developing a web scraper to collect multiple myeloma transplant rates
- Supported a pharmaceutical company's goal to optimize \$500M in annual drug sales by analyzing how generative AI could be leveraged to reduce costs and increase prescription volume
- Provided strategic insight on how A/B testing and predictive analytics could be used to minimize insurance appeal costs by referring patients to free goods

## SKILLS

Python, C/C++, Flutter, Java, R, JavaScript

Git, Linux, ROS2, Docker, Excel