

GIO CERUTTI

ceruttiga@gmail.com — (925) 660-5218 — Portfolio: <https://giordcer.github.io>

EDUCATION

B.S. Mechanical Engineering, Clarkson University

May 2024

GPA: 3.9

Minor: Computer Science

Relevant graduate coursework: Vibration Modeling & Control, Deep Learning, Symbolic Artificial Intelligence

Organizations: CU Formula Student, Mountain Bike Team, Outing Club, AIAA, ASME

EXPERIENCE

Avionics Engineer, Systems Integration & Test

June 2025 - Present

Northrop Grumman

Elkton, MD

- Own acceptance testing of 10-channel motion control system for second stage solid rocket motor in transition to production
- Lead avionics assembly & checkouts from actuator all the way to final vehicle assembly
- Leading hardware pedigree review automation, which will take engineers out of the loop and reduce pedigree review labor by 96% in the worst case
- Own controller software reprogramming, including nozzle null offset alignment & other tunable parameter adjustments
- Owner of electrical ground support equipment builds & maintenance
- Execute final data review & present results to customer

Systems Engineer, Product Line Alignment

May 2023 - June 2025

Northrop Grumman

Baltimore, MD, Potsdam, NY, & Saratoga Springs, NY

- Owned & wrote product line engineering methodology documentation for the NG product line center of excellence
- Developed custom data pipelines for adoption tools and product line metrics generation
- Led development of automatic knowledge dependency detection tool to keep documentation up to date
- PLE documentation continues to save non-recurring engineering costs for internal product lines

PROFICIENCIES

Software

CAD (Onshape, Solidworks), pure::variants

Programming Languages

Python (TF, Pytorch, SB3, Gym, NumPy, Pandas), MATLAB, C/C++

Certifications

Active DoD Secret Clearance, FCC Radio Technician (Element 2) License

Hobbies

Mountain biking, bike maintenance, auto maintenance, RC, making

PROJECTS

Clarkson Formula SAE

August 2022 - May 2024

- Researched, designed, fabricated, & tested composite axle prototypes
- Conducted trade studies & simulations to choose materials, adhesives, & geometries
- Designed tests & tooling to verify axle performance
- Fabricated up CFRP components, including aerodynamic surfaces

Deep Quantitative Agent

November 2023 - Present

Ausable Analytics LLC

Saratoga Springs, NY

- Designed & implemented RL agents using fully-custom RL environments & training schemes, thanks to advanced large scale data collection, cleaning, & augmentation
- Implemented and deployed models on Nvidia hardware
- Independent research project structured as LLC

Other Projects

- Electric coffee grinder (2024), simulation boundary layer visualizer (2022), modular micro quadcopter (2025)