GIO CERUTTI

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EDUCATION

B.S. Mechanical Engineering, Clarkson University *May 2024*
Minor: Computer Science
Relevant Graduate Coursework: Vibration Modeling & Control, Deep Learning, Symbolic Artificial Intelligence
GPA: 3.9
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

Associate Systems Engineer 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

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

Clarkson Formula SAE August 2022 - May 2024

· Composite axle: Researched, designed, fabricated, & tested composite axle prototypes
· Composite layups: Laid up CFRP components, especially aerodynamic surfaces

Other Projects

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