

SAMUEL DEARING

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Previously Held DoD Secret Security Clearance - Eligible for Reinstatement

EDUCATION

Arizona State University | Tempe, AZ Expected 2028

B.S.E. Aerospace Engineering (Astronautics) | GPA: 3.82/4.00

Marine Military Academy | High School GPA: 4.14 (Weighted) | Rank: 9/51

TECHNICAL SKILLS

CAD / Fabrication: SolidWorks, rapid prototyping, 3D printing

Programming / Analysis: Python, C++, MATLAB

Embedded / Electrical: Arduino, Raspberry Pi, Linux, wiring, schematics, diagnostics, relays

Sensors / Controls: PCLink, LiDAR, camera integration, GPS, IMU, telemetry, DC-DC power distribution

ENGINEERING EXPERIENCE

Engine Team Member | Sun Devil Motorsports Formula SAE Aug 2025 - Present

- Design and fabricate brackets, electronics mounting plates, and radiator fan shrouds; support master assembly and subsystem packaging.
- Support traction-control integration, wiring, and electronics layout using SolidWorks, MATLAB, and PCLink on a tightly packaged Formula SAE vehicle.

Generator Technician / Design Support | Landco Power May 2024 - Present

- Diagnose, repair, and maintain industrial generators up to 320 kW for construction-site power distribution and panel tie-ins.
- Use schematics, wiring diagrams, and field testing to isolate no-start, overheating, relay, and false-shutdown faults, often with limited documentation.
- Design replacement hardware in SolidWorks - including a Volvo magnetic-pickup component, breaker-box hardware, cable stress reliefs, couplings, and handles - to avoid replacing full assemblies and reduce downtime.

PROJECTS

Tracked Robotic Platform | Raspberry Pi 5, Python, Linux, SolidWorks

- Designed the platform in CAD and integrated LiDAR, camera, dual motor controllers, dual displays, DC-DC power distribution, fusing, cooling, and telemetry into a functional mobile system.
- Reworked control and display code to enable remote operation, live video, and onboard status output; resolved integration issues across wiring, power distribution, and LiDAR setup.

Access Control System for Heavy Machinery | Arduino Nano, GPS, Relays

- Built a keypad-based access system for heavy machinery that authenticates operators and logs runtime and use data to replace universal equipment keys.
- Integrated relays, GPS-ready tracking, custom code, and compact packaging into a field-ready prototype.

Directional Guidance System | GPS, IMU, Servo, Embedded Display

- Built a compact navigation prototype that combines GPS and IMU data to drive a servo-based pointer and real-time heading display.

LEADERSHIP

Cadet Company Commander | Marine Military Academy

- Led and mentored 60 cadets, maintained accountability and standards, and supported cadets through academics, college preparation, and high-stress field training; unit finished first in military and physical performance categories.

Platoon Sergeant | United States Military Academy Preparatory School

- Led training, accountability, and peer mentorship in a structured military academic environment.