Northrop Grumman — Engineering Intern

Rolling Meadows, IL | Summer 2023, Summer 2024, Summer 2025

- Supported RFCM, Restricted Targeting, and IRCM product lines across 3 consecutive internships.
- Diagnosed and triaged critical supplier issues during full environmental qualification testing.
- Created complex CAD models and technical drawings across multiple systems.
- Conducted thermal simulations and lab testing to validate circuit assemblies and materials.
- Led fixture inventory optimization to reduce re-procurement costs by up to \$15M.
- Participated in a high intensity drawing burndown effort to help programs catch up
- Worked with suppliers and vendors to procure and build electronics testing rigs
- Developed microelectronics fabrication processes, reducing failure rates by 25%.

PRISUM Solar Car Club — President

Ames, IA | Aug 2021 – Present

- Directed 150-member team and \$150K budget to coordinate design, manufacturing, and integration.
- Led design reviews and testing campaigns; improved composite component cost-efficiency by 20%.
- Managed issues during national race, earning 3rd place finish and WSJ feature article.
- Delivered technical strategy and cross-functional planning for next-generation solar vehicle
- Led a team for thermal-vibrational analysis using Ansys to determine battery pack safety using composite materials

Make to Innovate (M2I) — Project Manager

Iowa State University | May 2022 – Aug 2022

- Spearheaded research on cost-reduction strategies for autonomous drone operations.
- Delivered presentations to faculty and peers outlining drone platform enhancements and mission feasibility.

EDUCATION & QUALIFICATION

Iowa State University

B.S. Aerospace Engineering, Dec 2025 | Ames, IA

Security Clearance: Active Secret Clearance

PROJECTS

Composite Thermal Testing & Redesign

• Modeled, simulated, and redesigned carbon-fiber composite structure using Ansys to reduce thermal stress.

Pointer-Tracker Telescope

• Built a Newtonian telescope with pointer capabilities and slow track functionality

TECHNICAL SKILLS

CAD/Design: Siemens NX, SolidWorks, Autodesk Inventor Simulation/Analysis: Ansys Suite, Thermal Modeling, StarCCM+

Programming: Python, MATLAB, Linux

Manufacturing: 3D Printing (FDM, SLA), Engineering Change Management