

Available for an Internship from May-December, 2026

Maximus Anderson

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EDUCATION

Iowa State University

- Bachelor of Science in Mechanical Engineering
- Dean's list Fall 2023-Current

Anticipated graduation May 2027

3.65 GPA

WORK EXPERIENCE

Emerson Fisher | Additive Manufacturing Co-op

May 2025 – December 2025

- Led cast-to-LPBF transition for high-volume titanium part, scaling to 250–310 units/year and \$250K+ revenue.
- Modified design to eliminate overhangs, enabling support-free additive printing and reducing downstream machining processes by 1 step.
- Standardized and automated costing system from 7 manual inputs to 1 button, incorporating bolt hole calculations for 10% accuracy gains.

Iowa State University | Design & Manufacturing Engineer | *Student Worker* January 2025 – May 2025

- Designed and 3D printed high-precision probes, replacing \$3,240 CNC-machined parts.
- Applied DFM to model and assemble full wind tunnel (aluminum T-slots/mild steel), creating airtight seals and replicable setup for CFD analysis.

ENGINEERING PROJECTS

Formula SAE, Cyclone Racing | Powertrain Team Lead

August 2023 – Present

- Led 25+ member EV powertrain team for CR30 racecar; oversaw battery, cooling, and charging systems to ensure FSAE compliance.
- Initiated and led DCIR characterization of COSMX cells, ruled out significant pressure/current effects, then mapped resistance/SOC/temp and calculated specific heat for in-house thermal model.
- Converted IC water brake to EV dyno rig; ran first low load (5kW) EMRAX 208 tests.
- TIG-welded aluminum tractive battery housings (V1/V2); redesigned V2 from V1 manufacturing notes, removing bends/warping/internal fillets and slashing assembly from over 3 weeks to 2 days.
- Designed cooling loops for CR29/CR30 vehicles and batteries, adapting legacy radiator sims for EV thermal management.
- Played key role in 2-week steel tube chassis redesign (CR25-C) to recover schedule post-carbon chassis failure.

Personal EV Research | Personal Project

March 2024 – September 2024

- Modeled Molicel 21700 cylindrical packs with bus bars/fusible links for Tesla LDU Corvette integration, researching high-load thermal management via Trumony snake-tube cooling.
- Redesigned 10s2p Samsung 40T battery for Meepo skateboard rebuild to identify BMS overcharge risks to inform FSAE pouch cell strategies and prototype iteration.

1976 Honda CB750F Restoration | Personal Project

July 2025 – October 2025

- Full carburetors rebuild/jet syncing from seized floats/corrosion, replacement, compression/timing diagnostics, and electrical upgrades, enabling 100-mile post-reassembly drive.

SKILLS & INTERESTS

- **Skills:** SolidWorks; Siemens NX; 3DXpert; Teamcenter; MATLAB; Python; Blender; Excel; Ansys
- **Interests:** Vehicle Design; Vehicle Manufacturing; Electric Motors; Batteries
- **Languages:** English (fluent); Brazilian-Portuguese (conversational)