

Jackson Merrick

jacksonmerrick@gmail.com | 571-296-9070 | www.jacksonmerrick.com | [linkedin.com/in/jackson-merrick](https://www.linkedin.com/in/jackson-merrick)

U.S. Citizen, able to obtain and maintain a U.S. Government security clearance

EXPERIENCE

LAUNCHPAD AI

Mechatronics Engineer

El Segundo, CA

Feb 2026-Present

- Designed and integrated industrial automation systems at an early-stage robotics startup, across development programs for L3Harris and Lockheed Martin Skunk Works.
- After two months in the role, selected as mechanical design lead on a six-figure contract for a work cell with a four-axis gantry automating carbon-fiber sheet stacking.
- Designed 50+ custom parts across multiple customer machines, including grippers, tooling, interlocked safety systems, and automated part feeders.
- Converted customer requirements into component-level specifications and carried designs through PDR/CDR/MRR as subsystem owner, including external reviews presented to Lockheed Martin; briefed non-technical executives on status, risk, and tradeoffs.
- Released GD&T drawings, drove DFM iteration and quoting with vendors, and performed assembly, integration, and bench testing with custom Python and microcontroller tooling.
- Led root-cause troubleshooting on machines designed by other engineers and directed daily test operations; redesigned a part feeding system on a customer machine to cut cycle time by 25%.

TORC ROBOTICS

Prototype Hardware Intern

Blacksburg, VA

Summer 2023

- Owned design of sensor mounts and packaging on Level 4 autonomous semi-trucks.
- Pushed concepts through requirements, CAD, GD&T drawings, fabrication, and on-vehicle integration.
- Rapidly prototyped designs in SolidWorks for CNC machining, 3D printing, and sheet metal; coordinated purchasing and vendor communication.
- Owned forward sensor assembly deployed on every current-generation Torc truck.

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

Master of Science in Mechanical Engineering

GPA: 3.57/4.0

Atlanta, GA

Aug 2024-Dec 2025

Activities: Leader - Cru Graduate Student Ministry.

Course Project (Design Optimization): Multi-objective optimization of an *Ingenuity*-inspired Mars rotorcraft propulsion system, utilizing blade element theory, Halton-sampled RANS CFD, Kriging surrogate, and NSGA-II thrust-power Pareto optimization.

SOUTHERN METHODIST UNIVERSITY

Bachelor of Science in Mechanical Engineering

GPA: 3.91/4.0 (Magna Cum Laude)

Dallas, TX

Aug 2020-May 2024

Activities: Vice President - Tau Beta Pi Engineering Honor Society, Sigma Alpha Epsilon Fraternity, Club Lacrosse.

Undergraduate Capstone for Lockheed Martin

Recipient of the Sally Blum Memorial Prize in Mechanical Engineering

Spring 2024

- Delivered a mechatronic testing rig for F-35 composite airframe panels. Responsibilities included mechanical design/DFM, fabrication, integration, and testing.
- Product reduced testing setup time by 85%. Delivered 50% under budget through material reduction and design simplification, with no performance loss.
- Led weekly progress presentations with faculty sponsors and a Lockheed Martin Fellow.

TECHNICAL SKILLS

Software: SolidWorks (inc. Flow Simulation & FEA), Siemens NX, Autodesk Fusion, Python, Arduino, STM32, MATLAB, C, Jira.

Design & Manufacturing: GD&T, structural analysis, materials selection, composites handling, tolerance analysis, pneumatics, DFM (CNC machining, sheet metal, plastics).