Carson Schmitt

Atlanta, GA • schmitt.carson@icloud.com • 770-722-1477 • Portfolio • LinkedIn

EDUCATION

Georgia Institute of Technology, *Bachelor of Science in Mechanical Engineering* Expected May 2028
Robotics and Automation Concentration, Industrial Design Minor
Stamps Presidential Scholar – 1 of 50 students selected for academic excellence, leadership, and service at Georgia Tech.

WORK EXPERIENCE

RESRG Automotive, *Robotics and Automation Intern* Summer 2025 & Winter 2025-26

- Programmed and tuned FANUC industrial robots for pick-and-place and material handling across multiple production cells supporting 10,000+ parts per shift.
- Designed and deployed custom end-of-arm tooling that reduced part drops by 80%+, improving line reliability and yield.
- Integrated bowl feeders, escapements, and EOAT across five production stations, increasing uptime and part consistency.
- Validated reliability through thousands of cycles, iterating designs to eliminate failure modes in continuous-run production.

Chick-Fil-A Lake Dow, *Front of House Team Member* Feb 2023 – May 2025

- Assisted customers in the drive-thru, at the counter, and in other dining spaces to make them feel welcome and comfortable.

PROJECT EXPERIENCE

Combat Robotics, *Lead Mechanical Designer* Jun 2025 – Present

- Designed and built a 3-lb horizontal-spinner combat robot from concept through competition, balancing weapon energy, structural stiffness, and drivetrain performance under strict mass and safety constraints.
- Invented a cam-shaft shuffler drive to qualify for a 1.5× weight bonus, enabling higher weapon mass and improved survivability.
- Built, tested, and iterated hardware using rapid prototyping, material testing, and failure-mode analysis to survive repeated high-energy impacts.

VEX Robotics Team 5203G Gremlin, *Design and Software Lead* Aug 2014 – May 2025

- Led full CAD and system design for 50+ robots across 10+ seasons, integrating mechanical, electrical, and software subsystems.
- Developed autonomous navigation using PID, odometry, and sensor fusion of consistent on-field performance.
- Fabricated robots using laser-cut structural components and precision fastener systems, enabling repeatable, high-quality builds and rapid iteration.

LEADERSHIP EXPERIENCE

State and National Officer, *Technology Student Association* Aug 2018 – May 2025

- Elected to four senior leadership roles, representing 20,000+ students.
- Founded Georgia TSA's first student governance committee, improving feedback and decision-making across the organization.
- Delivered keynote address to audiences of up to 3,000 students and educators on STEM leadership and engineering pathways.

LITTERally Green Project GA, *Founder and Past-President* Jun 2024 – May 2025

- Founded to encourage the youth to make the world a cleaner place in and around the south metro Atlanta area.
- Organized community hikes and events reaching over 500 students including local outreach to elementary schools.
- Cleaned, recycled, and removed over 750 lbs of trash including scrap metal, and worked with local government to recycle safely and responsibly.

SKILLS

Mechanical: precision mechanisms, structural design, compliant systems, gear trains, tolerancing
Manufacturing: 3D printing, laser cutting, CNC-machined parts, fasteners, design for manufacturability
Prototyping & Test: rapid iteration, failure-mode analysis, cycle testing, reliability validation
Controls: PID, odometry, sensor fusion, actuator integration
Tools: SolidWorks, parametric CAD, object-oriented programming