GAVIN WORRELL

Mechanical Engineer · Founder, CEO & Chief Engineer
gavin.worrell@colorado.edu | (409) 204-3422 | Boulder, CO | Portfolio: gavintworrell.com | liminalstratum.com | LockedInAthletics.com | linkedin.com/in/gavin-worrell1/

PERSONAL PROFILE

- Mechanical engineering student at the University of Colorado Boulder (4.0 GPA) with hands-on experience designing and leading real hardware programs from CAD through test.
- Founder, CEO, and chief engineer of a defense technology startup, and founder of a second company that has scaled to $50K+ in revenue and national institutional contracts.

KEY SKILLS

- Design Software: SolidWorks, Onshape, CAD, MATLAB, Adobe Illustrator
- Engineering: Mechanical Design, CAD Modeling, Tolerance Analysis, Design for Manufacturing and Assembly (DFMA), Root Cause Analysis, Prototyping, Testing & Validation, New Product Development (NPD), Systems Engineering, Cross-Functional Collaboration
- Manufacturing & Operations: Manufacturing Process Design, Supplier & Vendor Management, Quality Control, Production Scale-Up
- Programming: C++, JavaScript, Embedded Systems
- Hardware: 3-D Printing / Additive Manufacturing, HV Electrical Systems, Electromechanical Design, Electromagnetics

ENGINEERING EXPERIENCE

Liminal Stratum · *Founder, CEO & Chief Engineer* — Jun 2026 – Present · Boulder, CO

- Leading mechanical design and systems engineering of a transmedium unmanned autonomous vehicle capable of air-to-water-to-air operation for anti-submarine warfare, sea mine clearance, and Navy ISR missions.
- Own CAD architecture, CAD modeling, and structural design across the airframe, propulsion, and avionics systems, collaborating with a cross-functional team spanning software, mechanical, electronics, and CAD.
- Targeting 60 mph in air and 17.4 knots (20 mph) underwater, with a calculated 3:1 thrust-to-weight ratio for the propulsion system.
- Completed a preliminary 3D-modeled hull design and arm mechanism, now reworking both based on further analysis, targeting first flight of the vehicle by October 10, 2026.
- Developing and leading the company's funding strategy, pursuing a NAWCAD BAA government development award while building a pipeline of defense-focused VC and angel investors.

Formula Society of Automotive Engineers (FSAE) · *Engineer* — Aug 2025 – Present · Boulder, CO

- Designed the high-voltage junction box distributing power from the accumulator alongside two teammates; researched enclosure sealing methods to maintain electrical integrity in wet operating conditions.

CU Autonomous Racing · *Mechanical Engineer* — Aug 2026 – Present · Boulder, CO

- CADing the entire chassis by reverse engineering it for CU Autonomous Racing, and designing and fabricating electrical component mounts and motor mounts integrated into it, while supporting redesign of the drive train for autonomous operation.
- Developing a system-level understanding of the autonomous vehicle across its mechanical, electrical, and software subsystems to support cross-functional design decisions.

Electromagnetic Braking Development · *CU Boulder — Engineering Project* — Jan – Apr 2026 · Boulder, CO

- Engineered the electromagnet enclosure and rotor integration for an eddy-current braking prototype with a five-person team; ran root cause analysis and testing & validation to reject two non-viable design concepts, increasing angular deceleration by a factor of 8.2.

LEADERSHIP AND TEAMWORK EXPERIENCE

Founder & CEO · *Locked In Athletics LLC* — Dec 2022 – Present · Houston, TX · Boulder, CO

- Founded at 16 after identifying a gap in the gymnastics equipment market; designed a modular gymnastics backpack, then built and managed manufacturing, supplier and vendor management, and marketing operations myself.
- Scaled to 500+ units sold and $50K+ in revenue in 2025 through hands-on production scale-up and quality control, including institutional contracts with the U.S. Air Force Academy and the Jamaican National Gymnastics Team.

OTHER EXPERIENCE

Business Advisor · *SimpleLawTX* — May 2026 – Aug 2026 · Texas

- Advised on marketing strategy and client acquisition; produced ad campaigns and video scripts for a tradesperson-focused legal brand.

Gymnastics Coach · *Above The Bar Gymnastics Academy* — Jun – Aug 2023 · Kemah, TX

- Coached recreational gymnasts ages 4–10 in form, flexibility, strength, and technique.

ATHLETICS — COMPETITIVE GYMNASTICS

Gymnast — Level 10 JE · *Above The Bar Gymnastics Academy* — Nov 2014 – Jun 2023 · Kemah, TX

- Competed at elite level through Level 10 JE; qualified for JO Nationals and Future Stars Nationals at the U.S. Olympic Training Center; earned Academic All-American honors.

EDUCATION & SKILLS

B.S. Mechanical Engineering, Minor in Business Finance · University of Colorado Boulder · Aug 2025 – May 2029

GPA: 4.0 / 4.0 · Dean's List every semester · SAT 1550