

Adam Groban

adamgroban.com | adamgroban05@gmail.com

EDUCATION

University of Colorado Boulder, Engineering Honors Program

Boulder, CO

Bachelor of Science – Mechanical Engineering

August 2024 – May 2028

Minor – Engineering Management

Relevant Coursework: Thermodynamics, Fluid Mechanics, Statics and Structures, Component Design, Mechanics of Solids, Computational Methods, Materials Science, Circuits/Electronics, Differential Equations, Linear Algebra

Activities: CU Formula SAE, CU Fly Fishing Club Officer, Alpha Tau Omega Executive Board

ENGINEERING EXPERIENCE

Engineering Intern

June – July 2026

ESAB Corporation

Hanover, PA

- Created, prototyped, and tested new consumable welding products with ESAB R&D department
- Designed and built a custom AI model to automate product testing data analysis for the 8-person engineering team, improving data analysis time by ~12x
- Developed manufacturing procedures that raised post-build ultimate tensile strength (UTS) of aluminum WAAM components by 30% through residual stress mitigation
- Coordinated with test welders and ESAB offices around the world to improve product development and testing procedures

Powertrain Engineer – CU Boulder Formula SAE

September 2024 – Present

- Designed the chain guard, air intake, and spacers for a student-built race car using SolidWorks, ANSYS FEA, and GD&T
- Performed air intake flow study using Realis and ANSYS topological optimization to reduce component weight and improve air-fuel ratio
- Machined each part using lathes, drills, saws, and CNC mills
- Design, manufacture, and assembly of entire vehicle in a 9-month time frame while coordinating with multiple other subteams
- Team placement of 31st out of 124 international entries

Tensentric Human-Centered Design Award

September – December 2024

- Designed and fabricated a portable camping stove attachment for safer outdoor cooking on uneven ground
- Led CAD and prototyping phases within a team of four peers using SolidWorks and OnShape
- Design and testing of ~20 element prototypes to meet target weight, performance, and ease-of-use
- Won the Human-Centered Design Award for “best-optimized user experience” at the 2024 Collegiate Engineering Design Expo (89 teams, 500+ students)

ILF Youth Innovation Contest Bronze Winner

May - August 2021

- Developed wireless electric car charger in a team of three, including prototype, cost, and market assessment
- Built fully accurate simulations of large-scale manufacturing using quantitative modeling
- Presented to prominent STEM leaders from over 80 countries, placed 3rd out of 68 high school and college teams

ADDITIONAL EXPERIENCE

Server – Topgolf

May – August 2025

- Order-taking and transport of food, beverages, and necessary kitchen items throughout the establishment
- Reliable, professional communication with customers, team members and managers to fulfill duties

Caregiver for Neighbor with Cerebral Palsy

June 2020 – August 2024

- Before and after-school care for a local woman with Cerebral Palsy
- Over 2500 care-giving visits fulfilled during high school in reliable, courteous fashion

Varsity Rowing, DC National Rowing Club

August 2021 – June 2024

- Two-time National Championship qualifier, consistent top finishes in the Mid-Atlantic region

SKILLS

Engineering Software: SolidWorks (CSWA), Siemens NX, ANSYS FEA and CFD, Realis, Excel, MATLAB, Python, Java, JavaScript

Machining: Welding (TIG, MIG, SMAW), CNC Milling, Lathes, Saws, Drills, 3D printing