Samuel Camp

samuelsebcamp@gmail.com | +1 (314) 973-4979 | Boulder, CO | www.linkedin.com/in/samuelcamp

EDUCATION

Bachelor of Science, Integrated Design Engineering – Mechanical Engineering Emphasis Graduated: May 2025

- University of Colorado, Boulder (GPA: 3.52)
- Minors: Business and Entrepreneurship

TECHNICAL SKILLS

Design: SolidWorks, Fusion 360, CAD, Altium Designer, Autodesk Eagle, Mastercam, CFD, FEA, GD&T

Hardware: 3D Printing, Laser Cutting, Welding, Soldering, Rapid Prototyping, DAQ Systems, Test Setups

Software: Arduino, C++, MATLAB, ANSYS, Simulink, EES, Python, NI LabVIEW, Swift, Microsoft Office Suite

Achievements & Certifications: Engineer in Training (Mechanical EIT), SolidWorks Professional (CSWP), Data Literacy Certificate (DataCamp), Dean's List, Chancellor's Achievement Scholarship, New Venture Creation Winner

Patents: Camp, Samuel. 2025. METHODS AND APPARATUS TO REMOVE TABS FROM MACHINED PARTS. 63/483,471, filed April 4, 2025. Patent Pending.

RELEVANT EXPERIENCE

Engineering Support Intern – Integrated Teaching and Learning Laboratory Jan 2023 - May 2025

- Designing and teaching workshops in 3D printing, Arduino, PCB design, and CNC manufacturing to 1,000+ students
- Assisting undergraduate and graduate students with complex and innovative engineering projects

Research Assistant Intern – Knappe Quantum Research Lab May 2024 - Aug 2024

- Led the design process for advanced magnetometer systems, coil assemblies, and optics experiments, ensuring accuracy and repeatability in test setups
- Worked with the research team to refine experimental objectives and align designs with research goals

Legal Assistant – Access Disability, LLC May 2017 - Dec 2022

- Handled initial client contacts for Social Security law firm
- Programmed and managed Customer Relations Management database

ENGINEERING PROJECTS

Project Manager – Machine Tab Remover, *Mechanical Engineering Senior Design Capstone* Aug 2024 - May 2025

- Led the development of an optimized machining solution for Accu-Precision Inc.
- Designed 60+ components in SolidWorks, created part drawings, and supported machining and assembly to develop a system that improves the quality of aerospace part production
- Conducted CFD analysis, structural analysis, and vibrational testing to validate system performance
- Projected to save Accu-Precision $100K+ annually; achieved 1st place for *Product Functionality Award*

CAM Engineer – Drill-Powered Drift Bike, *Component Design* Jan 2024 - May 2024

- Designed, manufactured, and welded a drill-powered bike in collaboration with my team, competing successfully in a class-wide racing competition
- Conducted in-depth analysis of critical drivetrain components to optimize power transmission

Project Lead and Design Lead – Ventus: Ionic Jet Propulsion Prototype, *Invention & Innovation* Aug 2023 - Dec 2023

- Engineered and constructed an electric jet engine, delivering ultra efficient, zero emission flight capabilities with a whisper-quiet noise output of ~33db
- Won *Section Award, Sustainability Award,* and *Industry Award*

Electrical Lead – Fire Power, *Projects for the Community* Jan 2023 - May 2023

- Developed a waste-heat capture device to generate power in remote areas with limited or no access to a reliable electrical grid
- Collaborated with *Engineers Without Borders* to develop affordable energy infrastructure in Guatemala