

Jacob Auman

US Citizen | <https://jacobauman.com/> | <https://www.linkedin.com/in/jacob-auman/>

EDUCATION

Colorado State University

Fort Collins, CO

Pursuing Bachelor of Science in Mechanical Engineering | Honors Program

Graduation Date: May 2026

WORK EXPERIENCE

Dunedin Radiator and Auto Sales

Dunedin, FL

Automotive Apprentice

Jun 2020 - Aug 2023

- Inspected, diagnosed, and repaired a diverse range of vehicles, including sedans, trucks, and SUVs.
- Serviced radiators, fuel systems, brakes, oil, electrical components, and completed several full engine replacements.

Phoenix Tailings through Open Avenues

Remote

Propose a Sustainable Ferroalloy Extraction Method

Feb 2023 - May 2023

- Collaborated with a mentor and team to develop a comprehensive understanding of ferroalloy composition, resulting in the identification of key elements for optimal product quality and economic significance.
- Researched and analyzed alternative steel production methods, identifying innovative approaches to increase reduce energy consumption by 95% and eliminate 100% of the carbon emissions compared to traditional blast furnaces.
- Led the development of an industrial-scaled process for Ferro-Manganese production using an Aluminum thermite reaction that complete with CapEx OpEx calculations and operating yield.

Xylem Water Solutions

Remote

Supplier Contact and Data Validation

Jan 2023 - May 2023

- Automated the process of reaching out to over +300 supplier contacts using Mailmerge and Excel.
- Completed diversity status verification by successfully confirming that all suppliers had up-to-date documentation, and worked with suppliers that were eligible to obtain diversity documentation.

PROJECT EXPERIENCE

Pushup Pose Estimation

Remote

Personal

Jun 2023 - Jul 2023

- Identified the number one mistake made during pushup exercises, not keeping a straight back.
- Built a pose estimation tracking program, powered by the Ultralytics Yolo v8 model that give personalized feedback measuring how straight the user's back is through linear regression and detecting when each rep is completed.

Bump Social App

Remote

GTech Startup Exchange

Feb 2023 - May 2023

- A collaboratively built full-stack mobile app designed with the intent of connecting new people across college campuses. Powered by React Native, Java, and Google Firebase.
- Designed and Built the signup, login, profile creation, and home screens through React Native.
- Contributed to the team researching Geolocation Libraries and back end server implementation for functionality.

TECHNICAL SKILLS

Excel Calculations | Accounting | Matlab Scripting | Python | React Native | CAD | Fusion360 | Solidworks | Rapid Prototyping | Additive Manufacturing | Iterative Design | Technical Writing | Research | Digital Design | ChatGPT Prompt Engineering | OpenCV | Ultralytics | VSCode | HTML | CSS | Arduino