

Zachary Rempell

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Education

University of Colorado Boulder – Boulder, CO

May 2026

- **Bachelor of Science** – Mechanical Engineering
- **Minor** – Engineering Management
- **GPA** – 3.50 Dean's List

Experience

Project Manager, Senior Capstone, Sierra Space – CU Boulder

Aug 2025 – Present

- Leading interdisciplinary team of engineers to develop a scale model aeroshell test article and wind tunnel testing procedure for Sierra Space.
- Developing a subsonic test article and actuation system for aeroshell force characterization to provide data expectations and procedures for hypersonic testing.

Test Systems Design Intern, Creation Technologies – Westminster, CO

Jun 2025 – Aug 2025

- Developed and integrated an automated test software for voltage and resistance systems, improving consistency and reducing manual setup time by up to two-thirds.
- Created an internal training matrix on SharePoint using Power Automate to track employee skills and onboarding progress, and migrated training data from outdated systems for continuity of records.

Mechanical Engineering Intern, RADAR – San Diego, CA

Jul 2024 – Aug 2024

- Collected and organized defect data for over 700 rejected sensor chassis and presented key findings to engineering and business teams to inform future design decisions.
- Served as lead of mechanical design for the development of a prototype computer vision sensor, using additive manufacturing and parametric modeling to provide the team with a polished and functional testing platform.
- Designed and built a mobile sensor testing rig using SolidWorks that allowed for increased testing throughput and flexibility of testing location.

Robotics Activity Lead, Life Camp – Pottersville, NJ

Jul 2022 – Aug 2022

- Developed an 8-week robotics-based STEM curriculum for children ages 6-14 at a nonprofit summer camp.
- Led daily robotics sessions for 100+ children, using Lego Mindstorms to teach core engineering principles.

Robotics Internship, Robot Revolution – Summit, NJ

May 2022 – Jun 2022

- Built a class organization tool using SQL to streamline internal scheduling and data management.
- Taught coding and problem-solving using Lego Mindstorms and Scratch to 100+ students daily.

Sales Associate, J.Crew – East Hampton, NY

Jun 2021 – Aug 2021 & May 2023 – Jul 2023

- Men's sales associate, leading in sales-per-hour while delivering personalized service in a high-volume store.
- Maintained merchandise standards and supported operations across the sales floor and stockroom.

Additional Experience

VEX Robotics, Robot Revolution – Summit, NJ

Sep 2013 – Jun 2022

- Team Captain and Lead Designer for competitive robotics teams, placing 3rd in the NJ State Tournament.
- Participated in the 2021 World Vex World Championship Tournament as 1 of 12 teams from NJ.

Delivery Volunteer, G.R.A.C.E – Summit, NJ

Sep 2020 – Jun 2022

- Organized, packaged, and distributed hundreds of bags of essentials weekly to underserved local residents

Skills

CAD Tools: SolidWorks (CSWA), Fusion 360, Inventor, Rhino, OnShape

Manufacturing: Additive Manufacturing, Laser Cutting, CNC Routing

Programming: Python, C++, MATLAB, LaTeX, NI LabVIEW, NI TestStand

Tools & Platforms: Microsoft 365, Google Suite, Jira, Trello, Notion