

Jacob A. Pomerantz

JacobPomerantz2025@u.northwestern.edu • (720) 456-1614
7801 East 8th Avenue, Denver, CO 80230 • jacobpomerantz.github.io

EDUCATION

Northwestern University, Evanston, Illinois; GPA: **3.42**

Bachelor of Science in **Mechanical Engineering**, *Manufacturing Concentration, Segal Design Certificate*

Relevant Coursework: Differential Equations, Thermodynamics, Mechanics of Materials, Programming in Python

RELEVANT EXPERIENCE

Northwestern Formula Society of Automotive Engineers: Powertrain Sub-team

10/22 - Present

- Active member (8-10 hours per week) of team responsible for maximizing power output of electric car for competition, while optimizing cost and weight.
- Team lead designing accumulator container and mounts for NFR 24. Apply CAD, FEA, and CAM software to design, test, and manufacture battery container and mounts.
- Manufacturing responsibilities include operation of waterjet and other CNCs to produce an array of car components, and assisting chief engineer with welding car chassis.

Ford Engineering Design Center: Shop Trainer

09/23 - Present

- Employed by Northwestern University in the Ford Design and Manufacturing Shop ~ 8 hours per week to train and assist undergraduate and graduate students in use of mills, lathes, bandsaws, laser cutters, CNCs and other machines.
- Work with other students involves applications for research, class, and other personal projects.
- Complete modules on manufacturing methods and applications to broaden personal skills.

Research Assistant: McCormick School of Engineering

09/23 - Present

- Collaborate with Professors Kornel Ehmann and Ping Guo to manufacture automated implant device for delivery of HIV medication.
- Manufacture and assemble machine with 4 integrated processes: cutting TPU plastic to deliver medication, implanting HIV tablets, sealing ends of implant, and removing formed medication from machine.
- Work has required extensive redesign of prior prototype, identification and ordering of appropriate parts, manufacturing of new and old components, and testing of new design's operational function.

LEADERSHIP AND WORK EXPERIENCE

Hilton Garden Inn, Breakfast Cook

Summer of 2022

- Prepared continental breakfast and made-to-order grill items 6 days per week, from 4:30 AM - 12:30 PM.
- Responsible for opening and closing kitchen and grill before and after all other employees arrived or left
- Never missed a shift.

Biltong Brothers LLC

2020 - 2021

- Owned and operated a Colorado-licensed business to prepare and sell biltong, a South African dried meat.
- Through website, social media marketing, and in-person selling, generated over \$4,000 in revenue and reinvested it to buy equipment and expand support team.
- Managed finances, designed company logo, and manufactured machine to marinate and cure meat.

BBYO Rocky Mountain Regional President

2021

- Elected by 400+ young men across 3 states to serve as regional president of an organization devoted to creating meaningful experiences for teens.
- In charge of region spanning 3 states (Colorado, Wyoming, New Mexico) and 14 chapters.
- Worked with board to plan events, fundraise, and recruit and preserve members during COVID-19.9

SKILLS

Computer: Proficient in SolidWorks, Python, MatLab, HTML 5, CSS 3, FeatureCAM, Excel, and Powerpoint

Language: Hebrew (conversational)

ADDITIONAL PROJECTS

X-ray Positioning Device: Designed and manufactured imaging prototype for use with immobile patients

Electric Skateboard: Designed electric vehicle; built battery in 12s3p configuration; installed ESC, BMS, and motors