Jack Sokol

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EDUCATION

Northwestern University, Evanston, Illinois
Bachelor of Science in **Mechanical Engineering** Expected June 2026
Segal Design Certificate
GPA: **3.73/4.00**

WORK EXPERIENCE

Mechanical Engineering Intern, Zenblen – Chicago, Illinois June 2024 – September 2024, April 2025 – September 2025

- Decreased the field error rate by 66% by troubleshooting product issues through root cause analysis and creating custom test fixtures to validate effective design changes
- Applied Design for Manufacturability and Assembly (DFMA) principles to design sheet metal parts, resulting in reduced part count and complexity to lower production costs
- Ensured product compliance with UL and NSF safety standards by analyzing designs and performing engineering calculations for key regulations like tilt specifications
- Prepared the company for expansion by implementing a standardized part numbering system, detailed exploded drawings of assemblies, and thorough build instructions
- Supported a machine learning initiative by collecting and preparing thousands of data points to train an AI model for detecting blend errors

Research Shop Assistant, Northwestern Research Machine Shop – Evanston, Illinois October 2024 – June 2025

- Facilitated project completion for graduate students and researchers by designing and machining custom components and providing hands-on assistance with 3D printing and fabrication

Design Intern, Segal Design Institute – Evanston, Illinois June 2023 – September 2023

- Led a 6-person design team from initial concept through manufacturing, managing client communication and presenting project milestones in biweekly design reviews
- Designed and prototyped a manual hoist system in SolidWorks to improve accessibility and safety for senior citizens using kayaks

PROJECTS

Formula SAE Suspension Team Member, Northwestern University Formula Racing September 2023 – Present

- Developed and fabricated carbon fiber suspension arms, using a manual lathe to create threaded aluminum inserts and validating their strength with tensile testing to meet our team's safety factor
- Engineered, programmed with CAM, and machined rear uprights on a CNC mill, using FEA to validate structural integrity while minimizing weight

Design & Communication Course Projects, Northwestern University September 2022 – June 2023

- Created steering assists in collaboration with Shirley Ryan AbilityLab to improve the function of recumbent tricycles in physical therapy, earning the project a Design Award at the design expo
- Collaborated with a 4-person design team to create a breadfruit storage solution through a user-centered design process, delivering a prototype to a non-profit organization for use in developing nations

PROFESSIONAL AFFILIATIONS

- NESA - National Eagle Scout Association
- Pi Tau Sigma Honor Society

SKILLS

Software: SolidWorks, Siemens NX, ANSYS, Fusion 360 (CAM), Onshape
Programming: MATLAB, Python
Fabrication & Machining: CNC Mill, Manual Mill, Lathe, Injection Molding, MIG Welding