

Eli Neff

801-889-6085 | etneff5@gmail.com | Engineering Portfolio at EliNeff.Com

Education

Utah State University — B.S. Mechanical & Aerospace Engineering with Honors, 4.0 GPA

Expected graduation: Spring 2029

Recipient of USU's Talent development award, dean's list, and A-pin

ASME Outreach Lead – USU Student Chapter of American Society of Mechanical Engineers.

- Leads outreach efforts for the entire USU ASME chapter, organizing 10+ yearly engineering education events, coordinating volunteers, and managing community partnerships.

Work Experience

Owner / Operator — Eli's 3D Printing

Fall 2021 – Summer 2023

- Designed, printed, finished, and sold 150+ of parts (\$1,000 total revenue); managed 80+ customer orders, print farm scheduling, and QA.

Volunteer Service — Church of Jesus Christ of Latter-day Saints

Fall 2023 – Fall 2025

- Supervised multiple volunteer teams and coordinated logistics to conduct community outreach.
- Spoke with 100+ people everyday, managed conflict, distributed literature, and performed extensive hands-on service tasks.

Event staff — Cold Springs Event Venue

Part-time Summer 2026

- Coordinated event setup, customer support, landscaping maintenance, and equipment preparation for private events including AV set up and event coordination.

Finishing & Assembly — Wyvern Warfare

Part-time summer 2026 - present

- Manufactured, hand-finished, assembled, and sold luxury wood and resin products, including extensive power tool use and repair.
- Optimized production workflows and delivered customer parts to spec.

Summary of Technical Projects & Skills

- **Line-Follower Robot:** Solely designed, printed, assembled, wired, and coded a line-follower from scratch (mechanical layout, drive train, sensor integration, and microcontroller wiring).
- **Propeller Design & Testing:** Designed, manufactured, and iteratively tested 3D-printed propellers for a rebuilt 4 stroke small engine, optimizing durability through design revisions.
- **CAD:** Fusion 360 (2019—Present); Autodesk Inventor; SolidWorks; including design, manufacture, engineering drawings, and simulations. Placed 2nd in state in TSA's CAD competition 3 years in a row.
- **Manufacturing & Prototyping:** Prototype development, FDM 3D printing, manual lathe, CNC milling, part fit/finish and iterative prototyping.
- **Programming:** Advanced Excel, C++, Python, embedded electronics and circuit building.
- **Shop & Safety:** Machining 1 & 2 (highest state test score), Small-Engine Repair, and First Aid.
- **Languages:** Fluent Mandarin Chinese, Conversational French