

# Jared Erickson

(541) 248-1335 | jcerickson7@gmail.com

## ACADEMIC HIGHLIGHTS

---

<b>Brigham Young University, Ira A. Fulton College of Engineering</b>	Provo, Utah
Masters in Mechanical Engineering	August 2025
▪ Cumulative 3.70 / 4.00 GPA	
Bachelors in Mechanical Engineering	August 2023
▪ Cumulative 3.96 / 4.00 GPA	
▪ Recipient of academic full-tuition scholarship	

## PROFESSIONAL EXPERIENCE

---

<b>BYU Mechanical Engineering Department</b>	Provo, Utah
<i>Compliant Mechanisms Research Lab Graduate Student</i>	September 2023 - Present
▪ Optimized and 3D printed compliant geometries for high-density strain energy storage	
▪ Developed a dynamic model for and prototyped a compliant mechanism-driven mechanical battery to validate and explore its performance	
▪ Characterized and implemented a brushed DC motor for electromagnetic transduction of strain energy stored in compliant mechanisms	
▪ Guided three undergraduate engineering students in weekly research on strain energy storage systems and motivated progress and responsibility in their activities	
▪ Implemented nonlinear FEA simulations to validate results from an elliptic integral-based algorithm that models end-loaded cantilever beams under large deflections	
<b>HP Inc.</b>	Corvallis, Oregon
<i>3D Polymers Factory Intern</i>	June 2023 - Present
▪ Designed a bulk powder transport system for use in the HP Inc. 3D AMS Factory to achieve cost goals and enable business verticals	
▪ Built a manual dye system for dyeing 3D-printed TPU and PA12 parts	
<b>BYU Mechanical Engineering Department</b>	Provo, Utah
<i>CrunchLabs &amp; BYU Collaborative Project Research Assistant</i>	May 2023 - June 2023
▪ Conducted a designed experiment to identify improvements in manufacturing parameters for a compliant micro-mechanism dart blaster made from carbon nanotubes (under a program with Youtuber Mark Rober)	
▪ Operated a photolithography mask aligner, thermal evaporator, an e-beam evaporator, and a carbon nanotube furnace to produce carbon nanotube growth samples	
<b>BYU Capstone Program</b>	Provo, Utah
<i>BYU-USAFA Cooperative Capstone Engineer</i>	August 2022 - May 2023
▪ Developed improvements for and tested the mixing of energetic materials with a collaborative team of students from BYU and the US Air Force Academy	
▪ Formally presented design recommendations to USAFA and Air Force Research Labs military leadership	

**HP Inc.***Product Design and Tooling Intern*Corvallis, Oregon  
June 2022 - August 2022

- Characterized multiple adhesives under conditions of elevated temperature and pressure to identify solutions for foil delamination in a medical product
- Injection molded and machined proposed changes to product architecture and tested those changes to measure their impact on product performance

**BYU Mechanical Engineering Department***Fluids Lab Research Assistant*Provo, Utah  
June 2021 - April 2022

- Researched aerodynamic interactions of propellers using stereoscopic particle image velocimetry in a wind tunnel
- Calibrated imaging hardware daily, built experimental setups, and interpreted data to provide accurate data acquisition

---

**LEADERSHIP AND SERVICE EXPERIENCE**

---

**BYU Student Alumni***Audio/Video Technology Coordinator*Provo, Utah  
January 2021 - April 2021

- Organized BYU's 2021 Alumni Welcome event by reporting on personal assignments weekly to a volunteer team of 10 students
- Obtained sound systems, projectors, and screens to present video feeds and live music

**The Church of Jesus Christ of Latter-Day Saints***Full-Time Representative*Salta, Argentina  
September 2018 - April 2020

- Led groups of 8-10 volunteers by following up on daily goals, conducting weekly training meetings, and creating weekly progress reports
- Increased volunteer effectiveness by providing training for planning, goal setting, problem solving, and increasing productivity

---

**ADDITIONAL SKILLS**

---

- Proficient in Spanish and English
- CAD modeling experience (Solidworks, Creo)
- Coding experience (MATLAB, Python, C++)
- Manufacturing experience (3D printing, machining, woodworking)
- Basic CFD experience (Star CCM+)
- Basic statistical analysis experience (R)
- Finite element analysis experience (ANSYS Workbench and APDL scripting)
- Technical coursework in linear finite element methods, fluid dynamics, control theory, kinematics, MEMS, deep learning, and optimization techniques