

Summary of Qualifications

- 2.5 years' experience in mechanical engineering and 3.5 years' experience in product development
- Named co-inventor on 3 USPTO patent applications
- Product design, development, and integration experience spanning 4 novel products and varying subsystems, including electronics enclosures, tooling & fixturing, robotics, end effectors, optics, PCBs, and medical devices
- Skilled in MCAD & ECAD, including SOLIDWORKS, OnShape, Fusion, and EAGLE, with GD&T experience
- 4 years' experience in rapid prototyping, including SLA/FDM 3D printing and CNC milling, validation testing, and industrial manufacturing processes, including sheet metal, injection molding, and composite layup

Experience

Chiplytics

Product Development Engineer

Aug 2023 - present

- Co-invented Microelectronics Inspection Platform and led mechanical design and integration, designing, prototyping, assembling, and testing 100+ parts and PCB assemblies for 4 demos and first pilot program
- Designed & produced first 7 commercially-sold Power Spectrum Analysis and Quickturn Socket units by leveraging FDM/SLA 3D printing, owning design cycles and building new supplier relationships
- Created and updated documentation on designs, tests, in-house fabrication processes, and product decisions
- Managed and mentored undergraduate hardware engineering intern in 2 robotics & systems design projects

Mechanical Engineering Intern

Aug 2022 - Dec 2022

- Designed modular enclosure for pilot Power Spectrum Analysis product, reducing unit cost by 50%
- Led equipment maintenance initiatives, communicating with OEMs over 3 month period and restoring in-house PCB milling capabilities
- Reduced R&D time for patent-pending Quickturn Sockets by 60% through parametrized Python scripts, process engineering, and CAM software testing

Simpl-E-Vac (*UW Engineering Innovation in Health*)

Consultant

Aug 2023 - present

- Produced informational videos for clinical and non-clinical audiences; showcased at Digestive Disease Week 2024
- Reviewed engineering design drawings and application materials for provisional patent & human subjects trial
- Pitched at 2024 Patient Safety Technology Challenge; invited to, and attended, CES 2025 as semifinalists

Clinical Engineer

Sep 2022 - Jul 2023

- Co-invented novel gastrointestinal surgery device for vacuum-pressure sealing of leaks/tears in esophageal tissue
- Led communication with 10+ external and internal partners, coordinating product research, testing & feedback
- Set design objectives, hired & onboarded 4 new team members to assist with process & prototype development
- Defined go-to-market strategy by researching funding, FDA pre-market approval, and human trial opportunities
- Pitched at 2023 Dempsey Startup Challenge, winning 3rd-place prize

Design Program Co-Chair, *HuskyADAPT (UW CREATE)*

Jun 2021 - Jun 2023

- Managed and mentored 4 teams of students and clients co-designing accessible tech solutions
- Led ground-up rebuilding of accessibility engineering curriculum, taught to 30+ students in yearly cohorts

Education

University of Washington, Seattle, WA | B.S. Mechanical Engineering | 3.64 GPA

Sep 2019 - Jun 2023

- Activities: *Interdisciplinary Honors, Honors Peer Mentors, HuskyADAPT, Engineering Design Coaches, Theta Tau*
- Awards: *'22 Danner Endowed Scholarship, '23 Emerging Leaders Scholarship, '23 Dempsey 3rd Place Prize*
- Related coursework: *Additive Manufacturing, Embedded Computing, Engineering Innovation in Health, Finite Element Analysis, Machine Design, Science & Engineering for Social Justice, System Dynamics Analysis*