

Education

Northwestern University

Sept 2020 – March 2022
M.S. Engineering Design
Innovation

Northwestern University

Sept 2016 – Jun 2020
B.S. Mechanical Engineering,
B.S. Manufacturing and
Design Engineering

Skills

Prototyping & Engineering

Laser Cutter
CNC Machining
3D Printing
Injection Molding
Hand Tools
Power Tools
GD&T
Metrology
DFM

Research

Design of Experiments (DOE)
Ethnographic research
Journey mapping
Marketplace analysis
Patent research

Design

Adobe Illustrator
Adobe Photoshop
Adobe InDesign
Figma
Mural

Software

Solidworks
NX
MATLAB
ANSYS
AMPL
Minitab
Python
Arduino

Project

Procter & Gamble Human-Centered Product Innovation

September 2020 – Present

- Conducted 8 interviews with consumers about their current pain points
- Journey-mapped key tensions and performed market analysis to identify opportunities within home cleaning for consumers 67+
- Tested 10 prototypes with 8 users to inform design requirements and service models for a complete product experience

Fountain Flex Human-Centered Design

January 2018 – March 2018

- Built and tested 4 design iterations with 8 prototypes going from minimum viable concepts to a high fidelity flexible molded product
- Validated designs against user and performance requirements generated from observational interviews and ethnographic research

Work Experience

Maui Greens Technology Intern

June 2020 – Present

- Concept to prototype design of R&D indoor plant growth watering system to vary fertigant solution dosing parameters for research
- Led conversations with vendors for equipment sanitation and environmental test chambers, investigating process integration
- Utilized Gantt charts, weekly status reports, and design reviews to drive forward movement, self-accountability, and decision making

Bossa Nova Robotics Hardware Engineering Intern

June 2019 – September 2019

- Hardware and electronics design of scale for use in validation of robot's weight and center of gravity for manufacturing quality checks
- Fabricated fixtures to increase repeatability of plenum foam seal placement in assembly of next-gen robots
- Assisted in PVT next-gen robot build, metrology, and SOP development

Paxion Capital Intern

June 2017 – September 2017

- Developed diligence, financial models, and investment memos to guide acquisition and investment decisions in seed and middle market investments in technology, real estate, and retail

Leadership

Northwestern University Peer Adviser

January 2017 – March 2020

- Adviser for group of 30 first-year engineering students
- Facilitated weekly dialogues on diversity & inclusion, academics, and mental health