Berwin Lan BERWINL.COM

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EDUCATION

Olin College of Engineering, Needham MA

B.S. Engineering: Computing MAY 2024, **GPA: 4.0/4.0**

- Recipient of 50%, $110K merit-based Olin Tuition Scholarship; MA Space Grant research funding (Spring 2021); Clare Boothe Luce research scholarship
- **Relevant Coursework**: Data Structures and Algorithms; Software Systems; Foundations of CS; Software Design; User-Oriented Design; Principles of Integrated Engineering; Modeling and Simulation; Quantitative Engineering Analysis

SKILLS

Coding: Python, MATLAB, Swift, TypeScript, Java, C++ for Arduino

Software: Git, CAD (SolidWorks, Fusion 360, Onshape)

Soft Skills: leadership, teamwork, communication, conflict resolution, design thinking, organization

EXPERIENCE

Microsoft — *Software Engineering Intern* MAY 2022 - PRESENT

- Design a web dashboard using **Figma** in **TypeScript React** and **HTML** to visualize customers' Dataverse API usage
- Create a custom data provider for Dataverse in **C#** to query and return telemetry data using **Kusto**

Olin College Crowdsourcing and Machine Learning Lab — *Student Researcher* JUN 2021 - MAY 2022

- Worked in the assistive tech mobile app space using **Swift** and conduct **user interviews** with 25+ codesigners and community partners
- Collected, analyzed, and visualized user and survey data with **Python** (pandas, Matplotlib) to inform design decisions

Clew Maps App JUN 2021 - MAY 2022

- Used **Swift** (SwiftUI, ARKit, UIKit) to implement novel route localization and cloud sharing features in *Clew Maps*, an iOS app that helps the blind and visually impaired navigate unfamiliar indoor spaces independently

Olin Rocketry — *Project Manager* SEP 2020 - PRESENT

- Manage 30+ undergraduates developing a 10,000 ft class rocket for the Intercollegiate Rocket Engineering Competition
- Solely responsible for overhauling the flight vehicle development cycle to shorten it from 3 years to 9 months, overseeing 5 subteams, allocating $15K budget, organizing 3 external reviews annually, and supervising multiple aerospace R&D projects

Olin Satellite + Spectrum Technology & Policy Group — *Student Researcher* OCT 2020 - MAY 2021

- Worked on SWARM-EX, a six-university CubeSat mission investigating how plasmas and neutrals interact across local, regional, and global scales using formation flying small satellites
- Used **SolidWorks** to design structural components of the CubeSat, contributed to 2 conference publications

FlatSat Project Manager FEB - MAY 2021

- Directed a team of 5 students in designing a test bed for validating and verifying satellite avionics modules
- Created CAD files; planned assembly, integration, and reliability testing of in-flight CubeSat components

Olin College Modeling and Simulation & Software Design Class — *Course Assistant* SEP 2021 - PRESENT

- Use **MATLAB** to teach students mathematical modeling and computer simulation of physical systems
- Introduce students to fundamentals of software engineering using **Python** through a project-based curriculum

PROJECTS

Community Insight Board — *User-Oriented Design* JAN - MAY 2022

- Codesigned a new mode of on-site community outreach for park and playground designers in a team of four
- Conducted two rounds of user interviews with over 10 codesigners, building our product around our synthesized findings

Reddit Sentiment Analysis — *Software Design* APR 2021

- Scraped Reddit posts, performing and visualizing sentiment analysis with **Python** (pandas, Reddit API)

Boba Blast! Game — *Software Design* MAY 2021

- Created an interactive game about collecting boba in **Python** using Pygame and the Model-View-Controller framework

Olin Gear Test Storefront — *Introduction to Entrepreneurship* APR - MAY 2021

- Employed **Lean-Agile** methodology to identify and solve major pain points of our college gear store in a team of 5
- In a 5-day sprint, sold 293 items to 237 supporters with $1,207 in profit; conducted user and market research