Berwin Lan BERWINL.COM

blan@olin.edu | (781) 492-3485 | linkedin.com/in/berwinl | github.com/berwinlan

EDUCATION

Olin College of Engineering, Needham MA

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

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

SKILLS

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

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

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

EXPERIENCE

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

- Work in the assistive tech mobile app space using **Swift** and conduct **user interviews** with 25+ codesigners
- Collect, analyze, and visualize user and survey data with **Python** (pandas, Matplotlib)

Clew Maps JUN 2021 - PRESENT

- Use **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+ members 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 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

California Institute of Technology Minnich Group — *Research Intern* JUN - JUL 2019

- Analyzed and validated large data sets using **Python** (NumPy, pandas, Bokeh)

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

- Use **MATLAB** to teach students mathematical modeling and computer simulation of physical systems

PROJECTS

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

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

OUT Maine Online Game — *Public Interest Technology Consulting Clinic* SEP 2021 - PRESENT

- Implement an online educational game to allow youth in Maine to engage with different gender and sexual identities
- Conduct user and pedagogical research in order to design a meaningful and empowering narrative

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

- Employ **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, sell 293 items to 237 supporters with $1,207 in profit, conducting user and market research