

Berwin Lan [BERWINL.COM](https://berwinl.com)

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EDUCATION

Olin College of Engineering, Needham MA

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

- Recipient of 50% 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 1, 2, and 3*; Products and Markets

** indicates coursework in progress*

SKILLS

Languages: Python, Swift, MATLAB, Java

Programs: CAD (SolidWorks, Fusion, Onshape), Git

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

WORK EXPERIENCE

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

- Use **Swift** to build *Clew Maps*, an indoor navigation and route sourcing app for the blind and visually impaired
- Collect, analyze, and visualize user and survey data with **Python** (pandas, Matplotlib)
- Conduct **user interviews** with 25+ codesigners to inform design decisions

Olin Satellite + Spectrum Technology & Policy Group — Student Researcher FALL 2020 - SPRING 2021

- Used **SolidWorks** to design structural components of a six-university CubeSat to meet requirements
- **Publication:** "Coordinating Development of the SWARM-EX CubeSat Swarm Across Multiple Institutions," Small Satellite Conference 2021, Spring 2021

Olin College Modeling and Simulation Class — Course Assistant FALL 2021

- Teach students skills in **MATLAB** during office hours and provide in-class support

California Institute of Technology Minnich Group — Research Intern SUMMER 2019

- Analyzed and validated data sets using **Python** (NumPy, pandas, Bokeh)
- Created and presented literature reviews and summaries for the group

PROJECTS

Clew Maps — Olin College Crowdsourcing and Machine Learning Lab SUMMER 2021 - PRESENT

- Use **Swift** (SwiftUI, ARKit, UIKit) to implement novel route localization and cloud sharing features
- See more at github.com/occamLab/Clew/tree/AppClipSwiftUI

Search Engine — Data Structures and Algorithms FALL 2021

- Build a search engine in **Python** using data structures on **Redis**

Reddit Sentiment Analysis — Software Design SPRING 2021

- Scraped Reddit posts, performing and visualizing sentiment analysis with **Python** (pandas, Reddit API)
- See more at github.com/olincollege/reddit-sentiment

Boba Blast! — Software Design SPRING 2021

- Built an action game in **Python** using Pygame and the model-view-controller framework
- See more at olincollege.github.io/boba-blast

LEADERSHIP EXPERIENCE

Project Manager — Olin Rocketry MAY 2021 - PRESENT

- Manage a team of 30+ members and budget of \$13K, overseeing a competition team and multiple R&D projects
- Shorten the development cycle from 2 years to 9 months, holding 3 external reviews annually

FlatSat Development Lead — Olin Satellite + Spectrum Technology & Policy Group SPRING 2021

- Direct a team of five undergraduate and graduate students across multiple universities in FlatSat development as the project manager, creating a calendar, delegating tasks, and organizing virtual meetings