

Richard Li

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VISIT ME: [RICHARDLI03.GITHUB.IO](https://richardli03.github.io)

Software engineering student looking for internship opportunities in summer 2023.

EDUCATION

Olin College of Engineering

May 2025

- Bachelors of Science in Engineering: Computing (GPA: 4.0/4.0)
- Relevant Coursework: Data Structures and Algorithms, Discrete Math, Software Design, Quantitative Engineering Analysis

All projects can be found on github: github.com/richardli03

EXPERIENCE

Olin Electric Motorsports

Worked as a sub-team lead on a team of 50+ engineers to design, build, test, and race an electric car for Formula SAE

Head of Sensing and Modeling

May 2022 - Present

- Lead a team to design and implement sensing and data collection capabilities on the car, create new modeling tools, and formalize existing ones
- Designed the harnessing and PCB placement around the car in communication with fellow leads

Telemetry: Real-Time Data Visualization

Sept 2021 - Present

- Using Python and Docker, created data pipeline to capture Serial data streamed from radio transceiver and replay previously recorded data streams
- Created a real-time vehicle status visualizer system to assist in driver-to-team communication during a race

OCCaM Lab Research Assistant

Created a suite of accessibility tools and applications for iOS devices using AR technology for the blind/visually impaired community

Visual Alignment with ARGeoAnchors

Dec 2021 - June 2022

- Used Swift and ARKit to create an AR-based navigation app for the visually-impaired
- Implemented iterative closest point alignment algorithm to minimize navigational errors
- Co-designed with 60+ members of the blind/visually-impaired community to improve UI/UX

Invisible Map

June 2022 - Present

- Using Python(NumPy, Pandas, and Matplotlib), built a back-end system to improve the optimization algorithm used to correct for drift and inaccuracy in positional detection
- Created a suite of benchmarking tools to parse and evaluate the quality of 3-D maps

SOFTWARE PROJECTS

Personal Website

Coded a personal website using HTML, CSS, Javascript, and Bootstrap.

catJAM: A music rhythm game

Used Python (pygame) to code a responsive and scalable rhythm game

3D Scanner: A one-sensor 3D Scanner

Used Arduino and Python to create movement and sensing suite with motors and an IR-sensor to map an object in 3D space.

Zao: Interactive Terminal Assistant

Used Python and Bash to write an application for the user's terminal containing scripts that greet the user, display the weather from an API, and allow the user to organize a to-do list

VISIT ME!



SKILLS

- **Software:** Python, Git, MATLAB, Linux/Unix, HTML/CSS/JS, Go, Swift, LaTeX, and Bash.
- **Language:** Fluent in Mandarin Chinese and professional fluency in French
- **Music:** Piano, clarinet, guitar, and ukulele, experienced with Logic Pro X and other Digital Audio Workstations