

Molly McHenry

<https://swe-portfolio-git-swe-site-mollys-projects.vercel.app/>

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EDUCATION

Brown University, *Sc.B. Applied Math-Computer Science* 3.97/4.00 GPA Sept 2021 - May 2025

Relevant Coursework: Software Engineering, User Interfaces/User Experience, Machine Learning, Computer Systems, Real-time & Embedded Software, Data Structures & Algorithms, Numerical Optimization, Graphs & Networks

WORK EXPERIENCE

IRIS Inc., *Embedded Software Intern* Remote | Jan 2024-current

- Developing real-time sensing & actuating medical headbands aimed at reversing Parkinson's symptoms
- Designed, tested, & deployed MCU software applications, specializing in C++ programming, sensor communication protocols (I2C, SPI), Bluetooth communication, & iPhone/Android App development

Skyryse, *Systems Test Engineer Intern* Los Angeles, CA | June-Aug 2024

- Developed a telemetry parsing system for the System Integration Lab, capturing & parsing UDP packets with a custom C program, made dynamic to new software drops via Python & MATLAB scripts
- Created an RTD software tool to read fault data from NVM on the FCA for the embedded software team, worked with the VNV & embedded software teams to shape the design & specs of the utility
- Worked with DevOps teams to ideate a streamlined, low-latency software pipeline for telemetry data

Brown University, *Software Engineering Research Assistant* Providence, RI | Sept-Dec 2023

- Collaborated with professor & front-end dev. to build an IoT app to streamline end-user control of smart devices
- Developed features for the backend rule-based engine for controlling smart devices

Brown University, *Teaching Assistant: Intro to Software Engineering* Providence, RI | Jan - Dec 2023

- Spearheaded project management for student teams, overseeing the development of full-stack web applications
- Conducted debugging & conceptual sessions & provided constructive code reviews for student projects

PROJECTS

Trek Travel Planning Web App (*Java, React, Typescript, HTML, CSS*)

- Designed a social media web app facilitating university students' connection & sharing of travel plans
- Engineered an internal API server capable of handling account creation, user events, posts, & friending
- Created a recommendation algorithm for custom ordering of friend posts, dynamically prioritizing friend posts based on user engagement patterns

EXTRACURRICULARS

Student Pilot, *Private Pilot's License* June 2020 – Current

- Pilot Cessna 172 aircraft & independently study aviation mechanics, electrical systems, & flight physics

SKILLS & INTERESTS

Technical Skills: C/C++, Python, Java, JavaScript, TypeScript, React, React Native, Firebase, HTML, CSS, Moshi, Matlab, Fuzz/Integration/Server/Unit testing, APIs, MongoDB, NumPy

Interests: sustainable aviation, ultimate frisbee, women's professional soccer, & NPR Tiny Desk Concerts