# Rebecca Flach

**rflach@olin.edu** | **520.955.0388** | [beccaf.dev](beccaf.dev)

## Education

**Olin College of Engineering**, Needham MA                                                           **May 2026**

- Bachelor of Science, Engineering with Design
- 3.75 GPA

**Relevant Coursework**

- Current: Data science, Complexity Science, Engineering Systems Analysis, Dynamics
- Past: Biomimetic Design, Quantitative Engineering Analysis, Introduction to Circuits, Principles of Integrated Engineering, Software Design, Modelling and Simulation

## Skills

**Design**

- Human centered design
- Co-design

**General**

- Project management
- Collaboration
- Mentoring
- Documentation

**Programming**

- Data science
- Web/app development
- Modeling and simulation
- Languages: Python, Matlab, Swift, Javascript, React, R

**Mechanical**

- Onshape
- SolidWorks
- Rapid prototyping and machine shop
- Mathematical modeling

## Experience

**Human Centered Design for Hospices**                                                           **Spring 2024**

- Conducted interviews with 8 people who had work in various types of end-of-life care.
- Synthesized findings, created frameworks, and used co-design methods to develop solutions.

**OCCaM Lab: Student Researcher**                                                           **Summer 2023**

- Co-designed with users to improve the accessibility and user experience of Clew, an app for indoor navigation for the blind and visually impaired.
- Used Python and Swift to increase the navigation precision using GraphSLAM, Cloud Anchors, and visual-inertial odometry.

**Shy Sioban: Systems Engineering Project**                                                           **Fall 2023**

- Collaborated with 3 peers with various engineering specialties to create an interactive animatronic.
- Designed parts for laser cutting and 3d printing using Onshape.
- Designed, built, and coded in C++ the control system using an Arduino, servo motors, and IR distance sensors.

**Software Design: Course Assistant**                                                           **Spring 2024**

- Mentored students of varying skill levels to develop their Python skills and improve class outcomes.
- Taught a software design mindset and emphasized process over solutions.

**TheSIS: Independent Project**                                                           **Aug 2021-Mar 2022**

- Built a redesigned mobile app for my high school's student information system in React Native.
- Iterated based on feedback from peers, teachers, and administrators, and worked with school district administration and external contacts to expand the scope of the project.

**MREN: Web Development Intern**                                                           **Dec 2020-Aug 2021**

- Did full stack web development using React, Express, MongoDB, and Nodejs.
- Worked on major features independently and made substantial contributions to the design.

**Academic Resource Co-designer**                                                           **Spring 2024**

- Assisted students with time management, project planning, and organization skills.