

Annabelle Platt

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 <https://github.com/19platta>

EDUCATION:

Olin College of Engineering

May 2023

Needham, MA

Bachelor of Science in Engineering: Computing

Recipient of 50% tuition merit scholarship

PROJECTS

Racial Profiling in Traffic Stops Data Analysis - Sept 2022 - May 2023

- My senior capstone project in college. Worked with public defenders in Massachusetts using statistical analysis to expose racial bias in police traffic stops
- Developed a process for requesting, standardizing, and cleaning traffic stop data of wildly varying quality
- Built an analysis tool in Python for public defenders to build reports for their defense

Robot localization - December 2022

- Used ROS 2 with Python to autonomously pilot a robot through a course simulating a road
- Included path planning, obstacle avoidance, sign recognition, and lane following

Plankton Identification tool - January 2020

- My favorite school project ever. Used public plankton image data to write an algorithm to classify plankton
- Binarized and isolated the plankton in the image, located the centroid, then performed a Fourier transform on the outline. Used Principal Component Analysis on the transform to classify plankton by species.

SKILLS AND TOOLS:

Programming languages: Python, C, Java, Javascript, Typescript, R, HTML, CSS/LESS

Tech skills and tools: AngularJS, Angular, MongoDB, REST APIs, Git, Github Actions, ROS 2, robotic navigation, MATLAB, image processing, ggplot, pyplot, matplotlib

Design: Figma, Sketch, Illustrator, human-centered design, user experience design, data visualization

Outside of work: Dance, activism, crochet

EXPERIENCE:

Onshape - Senior Software Engineer

Sept 2023 - present

Cutting-edge cloud-based CAD system

- Fullstack senior software engineer on Data Management team
- Worked with typescript and HTML/CSS/LESS to design and construct new features and fix bugs
- Worked with Java and MongoDB to develop and maintain REST API endpoints, optimize database queries, and manage data
- Re-architected and migrated large sections of legacy AngularJS code to Angular 19
- Completed multiple optimization projects to reduce both front end API calls and back end database calls
- Wrote automated tests for both front and back end features (playwright and mocha frameworks)
- Collaborate with support team to investigate, troubleshoot, and solve user tickets

MathWorks - Software Engineering Intern

June - Aug. 2021

MathWorks develops software for scientists and engineers

- Designed and built a dashboard to display performance test metrics for MATLAB online, using Javascript, HTML, CSS
- Refactored performance tests to improve efficiency

Duro Labs - User Experience Designer Dec. 2020 - Dec. 2021

Duro Labs is a small, cloud-based PLM company

- Worked as a consultant designing user experience and graphics for Duro Labs
- Designed and user-tested new features and improvements
- Created and revised iconography and graphics to ensure a cohesive, professional look
- Conducted an extensive user interviewing and human-centered design process to develop a serialization system
- Helped shape the documentation and design process of the company

Onshape - Software Engineering Intern

June - Aug. 2021

- Worked with Java, HTML, CSS/LESS, and Typescript to implement bug fixes and new features
- Submitted and contributed to code reviews

Onshape - User Experience Intern

June - Aug. 2020

- Analyzed improvement requests, building, testing, and revising mockups and providing guidance for developers
- Conducted user interviews with real Onshape users