Elizabeth Foster

Portfolio: elizabethfoster02.github.io
Github: github.com/elizabethfoster02

Email: elizaefoster@gmail.com
Mobile: 1-262-385-8895

EDUCATION

- **Tufts University** — Medford, Massachusetts
  Masters of Science in Computer Science; GPA: 3.83 — *September 2023 - May 2024*
  Courses: *Advanced Algorithms; Computing for Developing Regions; Quantum Software Development; Quantum Information*

- **Tufts University** — Medford, Massachusetts
  Bachelor of Science in Computer Science, Minor in Physics; GPA: 3.79 — *September 2020 - December 2023*
  Courses, Tufts University: *Programming Languages; Introduction to Algorithms; Data & Power: Surveillance; Introduction to Security; Machine Structures and Programming; Data Structures; Modern Physics*
  Courses, Queen Mary University in London: *Computability, Complexity and Algorithms; Software Development and Quality*

EXPERIENCE

- **Tufts University Computer Science Department** — Medford, MA
  Teaching Assistant for COMP40: Machine Structures and Programming (Part-time) — *January 2023 - Present*
  - **Review student code**: Grade and provide feedback on the Style and Organization of student submissions.
  - **Answer design and debugging questions**: Lead weekly office hours and lab sections to assist students with program design and structure by discussing course content and debugging C and Assembly code. Example projects include:
    * **Image Converter**: Given an image, perform a lossy compression and shrink the image to 1/3 of the original size through multiple iterative modules. Revert to a full-sized image.
    * **Calculator**: A full implementation of a calculator in a contrived, Assembly-like language. Features implemented include call stack, data structures, and operations.

- **Tufts University Physics Department** — Medford, MA
  Teaching Assistant for PHYSICS11: General Physics 1, Calculus-Based (Part-time) — *August 2023 - Present*
  - **Lead discussion section**: Facilitate intro-level physics course to 30 students through feedback-based grading, student-led discussions, and office hours

- **Best Buy Corporate** — Richfield, MN
  Associate Software Engineer (Internship) — *June 2023 - August 2023*
  - **Present pair-programmed code to team**: Collaborate with team members to complete Groovy-based story assignments daily; present and explain stories during code review; respond to quality assurance testing questions.
  - **Update NoSQL queries**: Revise inefficient queries to Cassandra by adding tables and proposing recommendations to modify call hierarchies while maintaining backward compatibility.

- **Rooted Farmers** — Remote
  Junior Software Engineer (Internship) — *April 2022 - September 2022*
  - **Generated data with backend functions**: Wrote a script to generate test data for local environment, increasing privacy and securing customer data. Developed technical skills including functional programming, databases, and multiple APIs.
  - **Track and display user data**: Implemented a fullstack project that recorded user actions on the platform using an API. Visualized data to describe use and inform product planning.

SKILLS

- **Languages**: Bash, C, C++, C#, JavaScript, Python, Q#, Typescript, HTML, CSS, Java, Groovy, SQL, NoSQL
- **Tools**: React, NodeJS, Spring Boot, Git, PostgreSQL, MongoDB, Twilio, Firebase, Cassandra, Jenkins, Jira

PROJECTS

- **HealthConnect**: A phone-based interface that quantifies medical severity through ChatGPT API and provides recommendations to the nearest clinic with the necessary specialty. Tech: Python, PostgreSQL, Twilio (May '23)

- **JCwordL - Latin/English Wordle**: A branch off of the open-source Latin Wordle to create a bilingual Wordle specific to National Junior Classical League conventions with a combined 2100+ attendees. Created and tested an "easy-mode" and "hard-mode" to accommodate all levels of Latin students. Tech: Typescript, React, Github pages (July '22, July '23)

ACTIVITIES

- **JumboCode** — Medford, MA
  Project Manager (Part-time) — *October 2022 - Present*
  - **Mentor and support development of a React site**: Create pairings of, write tickets for, and support the growth of a team of 8-12 student developers to best learn and complete a React website for Casa Myrna, Boston's largest domestic violence resource
  Frontend Developer (Part-time)
  - **Collaborate with team members**: Pair program the front-end implementation and the backend integration of a Canvas-esque React website for the Boston-based non-profit, G{Code}.

HONORS AND AWARDS

- Tufts University Neubauer Scholar - May, 2020 - Present
- Howard Sample Award (Physics) - May 2023
- Dean's List - January 2021, May 2021, January 2022, May 2022, January 2023, May 2023