# ELIZABETH W. FREY

Hanover, NH · +16032669091 · ewillowfrey@gmail.com github.com/lizfrey · linkedin.com/in/elizabethwfrey · elizabethfrey.me

#### **EDUCATION**

#### Dartmouth College, Hanover, NH

Jun 2024

Bachelor of Arts, Computer Science Major, Neuroscience and Math Minors

**GPA 4.0/4.0** 

Relevant Coursework: Object-Oriented Programming, Software Design and Implementation, Networks, Full Stack Web Development, Machine Learning, Statistics, Discrete Math for Computer Science, Linear Algebra, UIUX

Honors/Awards: Rufus Choate Scholar (2020 – 2022) awarded to top 5% of class, Citation in Networks and Full Stack Web Dev

#### Tuck School of Business, Hanover, NH

Nov 2021-Dec 2021

Tuck Business Bridge Program

#### RELEVANT EXPERIENCE

Tesla, Palo Alto, CA

Sep 2022-Present

Software Engineering Intern

Working on multithreaded systems with Tesla's Gateway Energy team in Go—achievements to be added

## Digital Applied Learning and Innovation Lab, Hanover, NH

Mar 2022-Present

Software Developer, Mentor

- Work with small teams to implement and deploy a different functioning full stack app every 10 weeks (15-20 hours/week during school year). Direct engagement with clients to ensure application caters to their needs:
- 2022 Spring: Flourish—frontend app developer on React-Native, Node.js, MongoDB, Express.js application. Mitigated a critical authentication vulnerability that affected 83% of users
- 2022 Summer: FitWit—developer lead, full stack developer on React-Native, Node.js, MongoDB, Express.js, Expo application. Created app architecture, wrote backend, and mentored two new developers on the technology stack

### Computational and Cognitive Neuroscience Laboratory, Hanover, NH

Mar 2021-Jun 2022

Researcher and Software Developer under Alireza Soltani, Ph.D.

Utilized HTML/CSS, JavaScript, and cPanel to convert and optimize the online version of the experiment. Online version increased participant numbers by 350% (21 to 74). Worked 10-20 hours/week during the school year

#### Department of Computer Science, Dartmouth College, Hanover, NH

Jan 2021-Nov 2021

Teaching Assistant for Problem Solving via Object-Oriented Programming (Java)

Gave feedback, graded assignments, and ran programming drills for groups of 8-12 students, created and held debugging sessions (200+ students attended over the three terms) and general office hours (12 hours/week during the school year)

#### ADDITIONAL EXPERIENCE

### DartUP, Magnuson Center for Entrepreneurship, Hanover, NH

Jan 2021-Present

Cofounder and Vice President

- Co-lead team of 15 creating social entrepreneurship challenge, focusing on the inter-disciplinary coordination of start-ups
- Acquired \$4000+ in funding for 8 workshops in 2021-2022 with 100+ total participants

# **PROJECTS** WellBuddies

## HackDartmouth 2022, Full Stack Web Development

Apr 2022-Jun 2022

- - Received 2<sup>nd</sup> place Health and Wellness award for landing page using **React**, **HTML**, **CSS**, and **Firebase**
- Converted into full stack mobile application using React Native, MongoDB, Node.js, Express.js for class final project
- Supports account creation, persistent login, and custom mental health activity suggestions based on calendar availability

Peer to Peer Dropbox Nov 2022

Computer Networks Final

- Led team (scrum leader) in leveraging Python for functional P2P Dropbox-like program
- Implemented threading, select, and sockets for simultaneous upload/download, and the UDP reliable transport layer

Parts of Speech Tagger Nov 2020

Java Program

Used data structures and OOP fundamentals to create program that tags words based on their part of speech, using Hidden Markov Model and Viterbi backtracking. Labelled 36,000 words from the Brown Corpus with 96% accuracy

### **SKILLS & CERTIFICATIONS**

Technical: Java, JavaScript, Python, React/React-Native, Node/Express, MongoDB, Git, HTML/CSS, Go, Networking Activities: Kappa Kappa Gamma Sorority, Women in Computer Science, HackDartmouth, Singapore Students Association