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-Dec 2022**
Software Engineering Intern
- Working on multithreaded systems with Tesla's Gateway Energy team—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 **Apr 2022-Jun 2022**
HackDartmouth 2022, Full Stack Web Development
- Received 2nd 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** method) 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, SKLEARN, Networking
Activities: Kappa Kappa Gamma Sorority, Women in Computer Science, HackDartmouth, Singapore Students Association

*Incoming Fall 2022