

ELIZABETH W. FREY

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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, Algorithms, Software Design and Implementation, Networks, Full Stack Web Development, Machine Learning, Statistics, Discrete Math, Linear Algebra, Computational Linguistics

Honors/Awards: Rufus Choate Scholar (2020 – 23), Phi Beta Kappa Prize, 3 academic citations for meritorious performance

RELEVANT EXPERIENCE

Palantir Technologies, New York, NY

Jun 2023-Sep 2023

Forward Deployed Software Engineer Intern, Commercial Life Sciences

- Owned HackWeek project backend development, leveraging **PySpark** and **Classifiers**, that led to meeting with CTO
- Designed and implemented new data pipeline and workflow for key client use case using **PySpark** in Foundry, integrating **LLMs** for data harmonization, leading client meetings to conduct user research and deliver demos
- Rapidly developed frontend and backend functionality using **React**, **TypeScript**, **Conjure** for contract renewal

Digital Applied Learning and Innovation Lab, Hanover, NH

Mar 2022-Present

Full Stack Lead, Development Mentor, Software Developer

- Work with small teams to implement and deploy a different project every 10 weeks (20 hrs/week during school year)
- Manage 11 full stack projects, lead 9 developer mentors and 50 full stack developers while updating lab tech stack
- Developer lead for a SmartScope (Raspberry Pi, **PostgresQL**), two **React Native** mobile apps, and a **React.js** site
 - SmartScope received an **Honorable Mention in the NIH's 2023 VentureWell DEBUT competition**

Tesla, Inc., Palo Alto, CA

Sep 2022-Dec 2022

Software Engineering Intern, Sitemanager Application

- Successfully designed and developed P1 over-the-air upgrade scripts and firmware in **Python**, **Golang** and **SCons** affecting 4000+ superchargers, preventing loss of all profits from affected superchargers in 2023 (\$100,000+/year)
- Represented team in project meetings, collaborated with staff firmware, integration, and service engineers
- Received exceeding expectations performance review

Computational and Cognitive Neuroscience Laboratory, Hanover, NH

Mar 2021-Jun 2022

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

- Increased participant numbers by 350% (21 to 74) by using **HTML/CSS**, **JavaScript** to create online experiment

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 interdisciplinary coordination of start-ups
- Acquired \$9000+ in funding for 20 workshops in 2021-2023 with 100+ total participants

PROJECTS

Russian Song Genre Classification through Song Lyrics

May 2023

Computational Linguistics Final

- Performed TF-IDF vectorization and BERT encoding, and algorithms such as Naïve Bayes, logistic regression, SVM, and random forest for classification using **Python** libraries **NLTK**, **SpaCy**, and **Sklearn**
- Achieved an accuracy of 43.8% on a balanced dataset and 72.7% on an unbalanced dataset

WellBuddies

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 final project
- Supports account creation, persistent login, and custom 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

- Implemented POS tagging using **Hidden Markov Models** and **Viterbi** backtracking. Labelled 36,000 words from the Brown Corpus with 96% accuracy

SKILLS & CERTIFICATIONS

Technical: Java, JavaScript, TypeScript, Python, React.js/React-Native, Node.js/Express, Git, HTML/CSS, Golang, Networks

Activities: Kappa Kappa Gamma Sorority, Women in Computer Science, HackDartmouth, Willing Hands