Hailey Pham

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EDUCATION

University of California, Berkeley — Berkeley, CA
Bachelor of Arts in Computer Science and Data Science, Minor in Economics — *Aug. 2022 – May 2026*

Coursework
Data Structures and Algorithms, Databases, Discrete Mathematics, Data Science, Machine Structures, Linear Algebra, Machine Learning, Web Design and Development, Probability and Statistics

EXPERIENCE

NASA — June 2024 – Present
AI/Machine Learning Engineer Intern — *Mountain View, CA*
- Developed and maintained a frontend search application using React, Vite, and Storybook with automated unit testing and documentation, while leveraging Bamboo for CI/CD (DevOps).
- Built a Retrieval-Augmented Generation chat-bot utilizing ML, AI, Large Language Models, and NLP to improve data accessibility and user experience for over 100,000 users on the Aviation Incident Report website.
- Optimized search results from large database queries using machine learning to enhance data retrieval. Contributed to full-stack development by integrating frontend and backend solutions to improve overall project architecture.

DebaterHub — July 2024 – Present
Project Leader / Software Developer — *Berkeley, CA*
- Developed an interactive front-end platform using Three.js and Vue, with a creative game-like design for students, built on prototype for navigating a knowledge graph to simulate 100,000+ multi-term debate dialogues
- Integrated the front-end with backend, implementing multi-user functionality with WebSockets, text-to-speech explainers, and Retrieval Augmented Generation (RAG) for enhanced user engagement for 1000+ users

Bank of America — May 2023 – August 2023
Cyber Security Intern
- Developed machine learning models utilizing natural language processing techniques to efficiently detect phishing and malware; algorithms for text classification and feature extraction to improve detection accuracy
- Enhanced accuracy through exploratory data analysis, feature engineering, and collaborated with a team to integrate the model into existing security systems automating threat detection and reducing false positives.
- Formulated an educational curriculum on cybersecurity awareness, engaging with employees to enhance organizational resilience against cyber threats.

Berkeley ANova — May 2023 - Present
Computer Science Instructor
- Spearheaded the development of Python, Web Development (CSS, HTML, Javascript), Game Development, and Data Science (Pandas) curriculum for more than 75 middle to high school students from underrepresented backgrounds in the Bay Area with both group and 1 on 1 teaching methods.
- Created workshops for 30+ mentors to deliver comprehensive educational materials and support to students, promoting inclusivity and engagement in computer science and higher education opportunities.

Phi Sigma Rho Engineering Sorority — August 2023 - Present
Front End Developer
- Revamped and maintained Phi Sigma Rho Engineering Sorority website, implementing CSS, HTML, JavaScript, and React-Vite with comprehensive documentation for improved user engagement and experience.
- Enhanced accessibility and user interaction for over 75 monthly visitors by implementing responsive design principles, optimizing load times, and improving navigation.

TECHNICAL SKILLS

Languages: Java, Python, C, C++, SQL, HTML/CSS, JavaScript, TypeScript, R
Frameworks: React, Vue, Next.js, Node.js, Flask, WordPress
Developer Tools: Git, IntelliJ IDEA, VS Code, Jupyter, GitHub, Jira, MySQL, AWS, Figma, Adobe Photoshop, ProCreate, UI/UX
Libraries: Pandas, NumPy, Seaborn, Matplotlib, Three.js, Vitest, Vite