Harsh Karia

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Education

University of California, Davis, B.S. in Computer Science — Sept 2022 – June 2026

- **Relevant Coursework:** UNIX Development, Machine Learning, Deep Learning, Computer Architecture, Computer Vision, Algorithm Design and Analysis, Data Structures and Algorithms, Statistics

Skills

Technical: Python, C/C++, JavaScript, React, Machine Learning, Deep Learning, Git, Fullstack Development, R

Experience

Software Engineering Intern, Corgi AI (YC) — Sept 2024 - Present

- Introduced automations for insurance data parsing and email marketing using OpenAI's LLM models and building internal APIs for financial data handling, reducing resource requirements by 100x
- Currently developing insurance policy pricing algorithm to identify optimal pricing strategies for risk mitigation

Software Engineering Intern, OurDate — Dec 2023 – Jan 2024

- Partnered with senior leadership to assess AI usage, designing and implementing prompts that accelerated time to final results by 200% through query optimization
- Engaged with beta testers and customers, gathering feedback to refine prompt customization, and led training initiatives for employees to enhance prompt generation efficiency by 2x

Researcher, Davis Applied Aerodynamics Lab — Nov 2023 – May 2024

- Directed a team of 4 in software planning and scheduling for UC Davis' CITRIS Aviation Competition Tean to design an optimized system for 32 air taxis
- Engineered prototypes of a multifunctional application enabling seamless interaction between passengers and vehicle operators within the new air mobility system, enhancing scheduling efficiency

Software Engineering Intern, American Wild Horse Campaign — June 2023 – Sept 2023

- Spearheaded end-to-end development of a mobile application using React Native and JavaScript, facilitating data collection for a nonprofit and successfully launching the app on the App Store
- Designed and deployed frontend user interfaces using Figma and integrated object detection models with 95% accuracy to automate wild horse identification in images using Azure Cloud

Software Engineering Intern, SchedGo — Nov 2022 – Mar 2023

- Revamped meeting type display to allow students to optimize schedules based on class times using TypeScript and React.js
- Enhanced app functionality for over 2500 monthly users across 4 universities by refining design and integration processes for schedule import/export and resolving outstanding bug issues

Projects

CerebralSecure — GitHub

- Developed a brainwave authentication system with OpenBCI EEG hardware, implementing SVM machine learning models and signal processing for personalized brainwave access to high-security applications
- Collected, filtered, and preprocessed 5+ hours of brainwave data and presented findings at California Neurotechnology Conference to professors and neurotech founders

Quizzical — GitHub

- Engineered a comprehensive machine learning study tool, enabling students to upload and customize lecture notes, recordings, and flashcards, leveraging Together.AI's Llama-2-70B model and OpenAI's Whisper models

FinGuard — GitHub

- Designed a random forest loan predictor tool, built with a Python Flask backend and React frontend, to enhance financial literacy among college students by providing personalized loan recommendations
- Won Best Design with code and Best Overall Hack(1st place) at SacHacks 5.0