# **Brandon Wong**

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#### **EDUCATION**

# **University of California, Davis**

Davis, CA | Expected Graduation June 2025

Computer Science, B.S. and Statistics, B.S. (Machine Learning Track)

Technology Management Minor | GPA: 3.67

**Coursework:** Data Structures and Algorithms, Advanced Deep Learning, Computer Vision, Computer Networks, Computer Architecture, Time Series Analysis, Data Science, Combinatorics, Discrete Math, Operations Management, Entrepreneurship

#### **SKILLS**

**Software Engineering:** Mobile and Full Stack Development, Databases (PostgreSQL, MongoDB), Git CLI, Github Machine Learning: CNN, RNN, LSTM, Transformers, Generative Models, GPT, LLM, Efficient Models, Diffusion Languages: C++, C, Swift, Javascript, Typescript, Python, Java, HTML, CSS, SQL, GraphQL, R Frameworks: SwiftUI, Next.js, PyTorch, React.js, Apollo GraphQL, Express.js, React Native, Realm

#### **EXPERIENCE**

### **Apple** | Software Engineering Intern

Cupertino, CA | June 2023 - Sept 2023

- Developed macOS Music Recognition and ShazamKit features in Swift for over 100 million monthly users
- Independently started a digital signal processing research project, developing a functional prototype
- Took initiative to pitch a new feature prototyped for an intern contest to the Health team leadership.
- Learned best coding and design practices through meticulous code reviews and delivered robust code

#### **HackDavis** | Technical Director

Davis, CA | Oct 2023 - Present

- Built hackdavis.io and judging.hackdavis.io for a student-run hackathon with over 1000 attendees
- Designed and implemented an algorithm to facilitate judging and scoring, ensuring fairness in the process
- Led technical workshops, teaching SwiftUI, Next.js, and full stack web and mobile development skills

#### **#include at Davis** | Technical Product Manager

Davis, CA | Sept 2023 - Present

- Developing a content management system and an e-store framework for local clients in Davis
- Performed code reviews, enforcing industry standards to ensure site reliability and scalability
- Learned system design when architecting codebases using Next.js, Apollo GraphQL, and PostgreSQL

#### **AggieWorks** | Software Engineer

Davis, CA | Jan 2023 - June 2023

- Built and deployed a roommate matching app in React Native for UC Davis Student Housing
- Implemented database functions, image caching, and 10+ reusable and reliable UI components

#### **PROJECTS**

#### **Song Vocal Extraction** (In Progress)

PyTorch, Scipy

• Developing a CNN and transformer architecture to extract vocals from a spectrogram generated from audio

## **Shazam Social** (Github)

SwiftUI, Realm, and MongoDB

- Developed a social media app with MVVM architecture for users to share Shazamed songs
- Implemented user authentication, a custom map view, and a cached image component

#### **Shoppr** (Github)

SwiftUI, Node.js, Express.js, Realm, and MongoDB

Developed a shopping list app using text recognition to scan price tags, creating a purchases API