RACHEL HU

EDUCATION

University of California, Berkeley

Bachelors in Computer Science (Expected Graduation: May 2026)

Current GPA: 3.88/4.00 Berkeley, CA

• Relevant Coursework: Computer Architecture, Artificial Intelligence, Data Structures and Algorithms, Probability Theory

Stanford University Online High School

• Relevant Coursework: Multivariable Differential and Integral Calculus, Advanced Topics in Microeconomics

Stanford, CA

PROFESSIONAL EXPERIENCE

Google Software Engineering Intern May 2024 - August 2024

Sunnyvale, CA

• Led 3 high-impact projects (Better @Mentions, Avatars in Smart Chips, Reactors View) in Google Chat iOS for 1M+ users

- Launched Better @Mentions feature internally (Fishfood & Hubfood); resolved 15+ bugs; prepared feature for production release
- Wrote 8,000+ lines in **Objective-C**, **Swift**, **Java**, implementing features and refactoring legacy code to enhance maintainability
- Wrote 85+ unit tests and 30+ integration tests, demonstrating prioritization towards testing and maintaining high code quality
- Spearheaded design reviews and cross-functional collaboration with PMs, UX, legal teams, and Android & Web engineers

Google

May 2023 - August 2023

Software Engineering (STEP) Intern

Sunnyvale, CA

- Implement swipe on message to quote-in-reply/edit feature in Google Chat iOS; streamlines and optimizes core user interactions
- Launched feature internally (Dogfood) after receiving QA and Feature Development approval; ready for production release
- Wrote 1400+ lines of Objective-C and Swift code, showcasing proficiency in new programming languages and practices
- Independently led project end-to-end: authored 14-page design document, developed three prototypes, led design reviews and collaboration with PMs, UX, Android, and more, wrote 15+ unit and integration tests, and spearheaded the feature launch.

ManageBetter

October 2022 - May 2023

Seattle, WA

Product Management Intern • Conducted 20+ Microsoft Clarity recording analytics reports and 15+ user interviews with top technology and finance managers; presented customer pain points and solutions to CEO and Lead Product Manager to integrate into product roadmap

• Created 3,500+ BSON documents in MongoDB in product database to improve software functionality for clients

COMMUNITY LEADERSHIP

UC Berkeley Student Government Office Head of Website Development

January 2024 - Present

Berkeley, CA

• Maintain UC Berkeley Student Government Office of Technology website (octo.asuc.org) using React.js, TypeScript, Tailwind CSS; transitioning to manage main ASUC website (asuc.org), supporting 43,000+ students. Mentored a team of 12+ developers.

PlexTech Software Consulting

Senior Software Engineer

January 2024 - Present Berkeley, CA

- Created Berkeley Crime app with React, Express, MongoDB to report campus crime in real-time (Github link upon request)
- Integrated Google OAuth for secure sign-in with @berkeley.edu emails, enhancing user trust and ensuring access control
- Engineered session persistence logic with a 30-second timeout, maintaining session continuity without compromising security
- Optimized back-end endpoints for seamless data retrieval from MongoDB, achieving sub-500ms response times for data requests

Chinese Youth Golf Foundation

Founder, President, Website Developer

May 2018 - August 2022 Detroit, MI

- Fundraised and managed \$14,550+ toward accelerating equal opportunity in golf through community and golf events
- Spearheaded/lead-instructed 6+ golf programs (impacting 60+ youth) through forging key partnerships with local golf courses
- Developed and designed chineseyouthgolffoundation.com: used Javascript to create button that generates randomized golf tips, set up webserver by configuring the website backend, setting up HTTPS encryption, and wiring the frontend to serve data to clients

IT Club at Berkeley Co-Founder, VP of Finance and Marketing August 2022 - December 2023

• Refurbished and donated 150+ computers to under-resourced students; created 10-paged budget development plan and corporate sponsors/partners portfolio to further nonprofit's mission of providing accessible technology and IT services to all

TECHNICAL EXPERIENCE/PROJECTS

Comet Classifier (UC Berkeley) | Python, React. js

September 2023 - November 2023

- Developed machine learning classifier with team to detect comets using Linear SVM and Jupyter Notebook (Github Link)
- Used SVD for feature extraction of comets based on the sigma values in order to find most significant features from image data
- Utilized SVM for precision classification, achieving 0.98 test accuracy. Enhanced insights with 3D matplotlib visualizations
- Used React.js and Flask-based backend to create website featuring classifier's ability to identify comets based on selected features

RecipeThyme (2021 Technovation Challenge) $\mid Swift$

October 2020 - March 2021

• Used SwiftUI to design mobile application with 3 team members to help low-income families find healthy recipes (Github Link) • Used Firebase database integration to save users' information, Swift's Form structure and picker/toggle elements to code

SKILLS & INTERESTS

- Technical Skills: Objective-C, Swift, React, HTML/CSS, Java, Javascript, Python, SQL, MongoDB, C/C++, RISC-V
- Interests: Competitive Golf, Skateboarding, Video Editing, LEGOs, Photography, Science Fiction, Fashion, Concerts

"Recipe Builder" function, and a JSON database of recipes to display recipe names in a user-friendly list