Prabhav Rao

United States Permanent Resident | prabhavrao@ucla.edu | 510-953-2962 | LinkedIn | GitHub | Portfolio

EDUCATION

University of California, Los Angeles

Los Angeles, CA

Bachelor of Science in Computer Science + Mathematics, Minor: Data Science Engineering

June 2027

Relevant Courses: Data Structures and Algorithms, Computer Networks, Operating Systems, Calculus Series, Linear Algebra, Advanced Algorithms, Differential Equations

EXPERIENCE

Backend Software Engineer Intern

June 2025 - August 2025

Teens 4 Teens Remote

- Engineered a **Python** backend with **Flask**, **Celery**, and **SQLAlchemy** to build a full-stack HR automation platform, automating recruitment from application to final decision, reducing manual processing, and centralizing applicant data.
- Developed an automated, multi-stage screening service that filters candidates by GPA, age, and async keyword scoring from **AWS S3** resumes, increasing interview-stage candidate quality by **50%**.
- Built a secure, role-based Flask **REST API** to power an HR dashboard, enabling real-time applicant tracking, stage updates, and interview evaluations, empowering the team with efficient access to candidate information.

Product Design Intern May 2024 - July 2024

Kahoot! Remote

- Guided the product's strategic redesign by defining key usability challenges and feature opportunities through comprehensive user research with over **35** students and teachers.
- Improved product usability and simplified the teacher workflow by designing and prototyping a major UI/UX overhaul that introduced a new content categorization system and a streamlined backend layout.
- Addressed critical user feedback on high content creation effort by pioneering a Generative AI feature concept that used prompt engineering to automate the generation of new "Sparks".

PROJECTS

Trading Strategy Backtester | Pandas, Matplotlib, Alpha Vantage API | \(\times \)

June 2025 - Present

• Currently building a quantitative analysis tool to historically validate trading strategies by implementing a backtesting engine in Python that uses Pandas for data manipulation and Matplotlib for visualizing performance.

Real-time Stock Watchlist with News | Flask, JavaScript, CSS, HTML | /

May 2025 - June 2025

Developed a full-stack stock watchlist dashboard using C++ with Crow for the backend, implementing multithreading for
efficient data handling, and HTML/CSS/JavaScript for the frontend to enable real-time stock price tracking and news
aggregation from live APIs.

File compressor with Web Interface | C++, Flask, JavaScript, CSS, HTML | /

Jan. 2025 - Mar. 2025

 Developed a full-stack file compression tool using a C++ backend for Huffman coding logic and a Python Flask/Tailwind CSS frontend, achieving a 58% average lossless compression rate for .txt and .pdf files via both web and command-line interfaces.

Mixed Fraction/Decimal Calculator with Web Interface | C++, Flask, HTML | ✓

Oct. 2024 - Dec. 2024

• Developed a versatile calculator by implementing a C++ backend with operator overloading to perform arithmetic on mixed fractions and decimals, exposed through a dual-interface system with a Python Flask web UI and a command-line utility.

TECHNICAL SKILLS

Languages: C++, Python, Java, JavaScript, HTML/CSS

Frontend: Next.js, React.js, Bootstrap

Backend: Python Flask, Django, MySQL, Node.js, Supabase, Pandas

Other Tools/Skills: Git, Docker, Golang, OCI Cloud, VS Code, Verilog, VIM, Agile, Multithreaded/Concurrent Programming