# Prabhav Rao

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#### **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

#### **EXPERIENCE**

## **Backend Software Engineer Intern**

June 2025 - Present

Teens 4 Teens

Remote

- Currently building a full-stack HR solution by developing a custom Applicant Tracking System (ATS), projected to cut manual hiring tasks by over 50%.
- Engineering the system using a no-cost stack (React, Node.js, Python, Google Apps Script) to automate applicant screening, interview scheduling, and new-hire onboarding.
- Integrating Calendly, Slack, and Google Workspace APIs to create a seamless, end-to-end user experience for both applicants and the HR team.

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 | /

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

Built a full-stack stock analysis dashboard to provide real-time market data by building a Python Flask REST API and a
dynamic JavaScript frontend that consumes data from the Finnhub and NewsAPI services.

## File compressor with Web Interface | C++, Flask, JavaScript, CSS, $HTML \mid \angle$

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

Frontend: Next.js, React.js, Bootstrap

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

Other Tools/Skills: Git, Docker, Golang, OCI Cloud, Linux/Unix, VS Code, IntelliJ, Verilog, VIM, LLMs, Agile, Financial Markets