Rohan Agrawal

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EDUCATION

University of California, Berkeley [2021-2025] - B.A. Computer Science - GPA: 3.5 / 4.0

- Computer Science 61A: Data structures and algorithms in Python, Scheme. SQL
- Computer Science 61B: Java. Data structures & Algorithms.
- Computer Science 170: Design and analysis of algorithms; models of computation; algorithms for optimum search trees, balanced trees and UNION-FIND algorithms; numerical, combinatorial & algebraic algorithms;
- Math 54: Linear Algebra and Differential Equations
- **Computer Science 70**: Discrete Mathematics and Probability Theory
- Data 8: The Foundations of Data Science, data visualization, regression, statistics
- **Data 100**: Data science lifecycle, question formulation, data collection and cleaning, exploratory data analysis and visualization, statistical inference and prediction, & decision-making.
- Linux Administration DeCal: Networking, Server hosting, Kubernetes, Docker, Linux, Terminal/Bash
- Cubstart: IOS App design with Swift and SwiftUI, APIs, JSONs, React, Firebase

Irvine Valley College [2021-2021]

- Computer Science 31 Database Management Programming: SQL programming; database management
- Engineering 20: Object-oriented programming with MATLAB/Simulink

WORK EXPERIENCE

Split: Boston, Massachusetts - [Chief Technology Officer][April 2023-Present]

- Built features for IOS Flutter App for a fast growing bill splitting startup with 1.2+ million dollars in attempted transactions. Worked with Google Cloud, Firebase, and App Store Connect.
- Implemented Verification Screen to limit access to the App during a trial period. Designed screen and created function for checking legitimacy of code using Google Firebase
- Introduced UI changes, allowing users to more easily see the details of their Split session.
- Built from the ground up a new "Split Evenly" feature allows users to split their bill evenly.

SeatEats: Berkeley, California - [Software Engineering Intern][September 2022-December 2022]

- Reduced user-reported defects by over 50% and resolved numerous security issues relating to SQL injection attacks, refactored backend to implement braintree payment processing in Javascript
- Built one-time-password generation tool using Twilio for password recovery and initial signup functionality

Lateral Link: Los Angeles, California - [Software Engineering Intern][August 2020] – [January 2021]

• Oversaw the implementation of an organized and efficient SQL database and the transfer of company data into more efficient storage

PROJECTS:

- <u>ChatTex</u> Electron Application coded in HTML, CSS & Javascript that integrates LLMS into a smart IDE for no-code LaTeX document creation. Flask for backend, OpenAI API used for LLM.
- <u>Vyasa</u> Email courier system utilizing LLMs to identify and label emails sent to an organizational email, then forward that email to an appropriate recipient. Utilized LLM database MindsDB in combination with PostgresQL for storage, coding done in SQL, launched to Azure. Frontend found <u>here</u>.
- RISC V-NN RISC-V Assembly implementation of a Neural Net for letter classification built from scratch
- <u>RISC V-CPU</u> Implementation of an ALU and RegFile for a basic RISC-V CPU, and a CPU datapath for executing assembly instructions
- [REGU]lated [LU]nar [S]torage Designed and implemented a client application for a secure file sharing system in GoLang. Use Public Key Encryption (RSA), Digital Signatures, HMAC, HashKDF, PBKDF, and Symmetric Encryption.
- <u>SplitShoppe</u> Fully designed a UI, coded, and launched a full-stack Swift IOS app that allows users to split bulk items from warehouse stores with people who have similar grocery lists. Implemented Firebase user authentication and Firestore database management.

STUDENT ORGANIZATIONS:

• *CALICO* - Developed competitive programming and mathematics problems, solutions, and problem outlines for a high school programming competition attended by over 600 students worldwide.

SKILLS: Python, Java, SQL, Scheme, MatLab, C/C++, Git, Django, React.js, Flutter, MongoDB, APIs, Javascript, TypeScript, Postman, Postgres, Next.js, Flask, Firebase, Stripe, Google Cloud, x86 Assembly, RISC-V Assembly