

Gabriel Alzate

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EDUCATION & SKILLS

Pomona College, Claremont, CA

Major: Bachelor's in Computer Science | Minor: Mathematics

Expected May 2021

GPA: 3.92

Languages

Java 8, Haskell, SQL, Python, C, C++, Bash, Dart, Swift, Javascript

Tools

Hive, Docker, gRPC, Git, UNIX, Vim, \LaTeX , Hadoop, Flutter

Relevant coursework

Cryptography, Software Development, Databases, Operations Research, Algorithms, Data Structures, Machine Learning, Computer Systems

EXPERIENCE

LinkedIn Corporation

Software Engineering Intern

May 2020 – Aug 2020

Sunnyvale, CA (remote)

- Developed a system that allows LinkedIn Learning's (LIL) 17 million enterprise users to create personalized branding for their published work to encourage consumer-curator interaction
 - Devised a design document detailing my proposed changes to LIL's **Espresso** database, evaluated it with 4 backend tech leads, and persuaded the database review committee for its approval
 - Built asynchronous **Rest.li** API using **ParSeq** and **Java 8** functional programming to support CRUD functionality for the new enterprise branding feature
 - Wrote **Hive** queries to gather raw data, spot trends in user profile information, and decide which edge cases are necessary to address by prioritizing issues that affect more than 10% of users
 - Led weekly team syncs and bug bashes with frontend engineers, designers, and product managers to review code and iterate on product designs
 - Presented my process and solution to over 40 LinkedIn Learning engineers as a tech talk speaker
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Kalibrr, Inc.

Software Engineering Intern

Jun 2019 – Aug 2019

Manila, Philippines

- Conducted intensive research on the benefits of using HTTP/2.0-based **gRPC**'s vs. **REST API**'s for Kalibrr, a Y Combinator-funded online job platform startup in Southeast Asia
 - Engineered gRPC microservices in **Python** for Kalibrr's **PostgreSQL** database which reduced API response deserialization time and payload size by 50%
 - Added HTTP/1.x backward compatibility by launching 3 **Dockerized** edge and service proxy servers
 - Taught myself **Nginx** and **Envoy** to optimize these proxy servers by eliminating concurrency errors and reducing response time by 40%
 - Deployed an internal **Flutter**-based mobile app in **Dart** that communicates with Kalibrr's first HTTP2-compliant, HTTP1 backward-compatible microservices
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Pomona College Computer Science Department

Head Teaching Assistant (CS062 Data Structures | CS140 Algorithms)

Jan 2019 – Present

Claremont, CA

- Collaborate with and lead a team of TA's to tutor 35+ students individually and in small groups
 - Conduct 2 weekly mentor sessions to guide students through assignments and address questions about lecture material
 - Optimize **Java** code for and meticulously grade the assignments of 5-6 students every week
 - Communicate frequently with and report back to professors about students' performance as head TA
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PROJECTS

SageDorms Room Draw

Feb 2020 – May 2020

- Created a dorm selection web app to replace the in-person room draw system of Pomona College
 - Wrote the frontend in **Javascript** and backend using Python's **Flask** framework to communicate with a **MySQL** database
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Middle Tree Student Sign-in

Jan 2019 – May 2019

- Developed **Bash** scripts to manage the CRM of over 150 students of Middle Tree, a nonprofit education center that provides affordable personalized tutoring
- Created a sign-in/out page that updates Middle Tree's database for its daily 10-20 students with a median latency of 32ms using **React**, **JQuery**, and Google Sheets API