

Gabriel Alzate

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EDUCATION & SKILLS

Pomona College, Claremont, CA

Expected May 2021

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

GPA: 3.92

Languages

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

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

May 2020 – Aug 2020

Software Engineering Intern

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

Kalibrr, Inc.

Jun 2019 – Aug 2019

Software Engineering Intern

Manila, Philippines

- Conducted intensive research on the benefits of using HTTP/2.0-based **gRPC**'s vs. **REST API**'s for Kalibrr, a Southeast Asian online job platform
- 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

Pomona College Computer Science Department

Jan 2019 – Present

Head Teaching Assistant (CS062 Data Structures | CS140 Algorithms)

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

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 app using the **Flask** Python framework and a **MySQL** database

SafeWalk

Feb 2020 – May 2020

- Developed an iOS app in **Swift** that shows college students the safest walking paths between locations
- Used the iOS Google Maps SDK to draw paths between two locations, avoiding areas with high criminal activity based on data fetched using FBI Crime Data API