Gregory Leeper

gleeper49@gmail.com
973-229-9778
https://cv.groogle.dev

Amazon - Publisher Technology Team

April 2022 - Present

Languages: Java | TypeScript
AWS Technologies: CloudWatch | SNS | SQS | Lambda | EventBridge

Full-System Unit Test Framework

Proposed, designed, and guided the implementation of a pseudo-integration testing framework that allowed our team to run full-system tests (i.e. test the full server flow similar to an integration test, but in a unit-test environment). Each test can decide whether to use real or mocked integrations. This effort led to time savings of ~60 minutes per day per dev. This capability also streamlined the process for moving our system to be full CI/CD.

Deal & Pacing Integration - Tech Lead

Owned, designed, and led the implementation of deal pacing capability on our ad server. This enabled a new Programmatic Guaranteed Deal offering to our advertisers where they could purchase a fixed amount (either number of impressions or percentage of our ads) over a given period of time. This was a cross-team effort that was drastically simplified by my proposal to use existing no-code solutions (e.g. AWS EventBridge).

Google - Cloud Build & Cloud Deploy Team

October 2019 - March 2022

Languages: Golang | Java
GCP Technologies: Cloud Build | Cloud Deploy | Cloud Pub/Sub | Cloud Spanner

Cloud Deploy Service

Lead the design and implementation for a new Google Cloud Service, Cloud Deploy. I owned the external and internal API from initial design/proposal, through review and release. I also contributed to the design and implementation of the Cloud Deploy backend, specifically the creation of an ORM-style database layer which enabled simpler transactional Cloud Spanner interactions.

Cloud Build Webhook Triggers

Proposed, designed, and built Cloud Build Webhook Triggers, Pub/Sub Triggers, and Artifact Registry Triggers. The initial demand was for a first-class Artifact Registry trigger, but I course-corrected and proposed creating webhook triggers which could be easily generalized and extended to implement Pub/Sub triggers and Artifact Registry triggers on top of that (as they both use HTTP protocols under the hood). At my time of leaving Google, these triggers were the source of 50k Cloud Builds per month.

Google - Qwiklabs Team

September 2017 - October 2019

Languages: Python | Ruby | Javascript
GCP Technologies: Kubernetes | Stackdriver | Cloud Pub/Sub | Cloud Spanner | Cloud Storage | gRPC | Cloud Deployment Manager | Cloud Resource Manager

Cloud Resource Fleet Management System

Proposed, designed, and built a microservice responsible for the cloud resource creation, distribution, and deletion system for Qwiklabs. This system increased lab start reliability from 98.25% to 99.995% at launch.

Lab Test Harness

Proposed, designed, and built a lab testing service which enabled lab authors to regularly and automatically start, run, and test their labs, and notify the author with appropriate info upon lab test execution failure.

GCP Activity Tracking

I implemented a framework which allows lab authors to dynamically check a student's progress during the course of the lab. This allows a student's lab to automatically be graded in real time.

Citadel LLC Internship

June 2016 - August 2016

Languages: Python
General CS Knowledge and Practice: Backend Engineering | Tableau Integrations

Built a framework to ingest multiple data sources, parse, aggregate, and then export the data to a Tableau integration dashboard for visualization and interactions by the Commodities team.

Education

Princeton University '17

- BSE in Computer Science - Magna Cum Laude
- Departmental GPA: 3.89 out of 4.0
- Overall GPA: 3.65 out of 4.0
- Independent Work: Predicting Soccer Match Outcomes Using Neural Networks
- Captain of the Princeton Men's Track & Field Team
- 3x Ivy League Champion (400 Hurdles 2016, 2017; Long Jump 2015)