Academic Qualifications

University of California Los Angeles

GPA: 3.9 / 4.0 • Summa Cum Laude • B.S. Computer Science • Dec 2019

Employment Experience

Tesla Palo Alto, CA

Senior Software Engineer

Feb 2020-

- Certificates backend for ISO 15118 Plug and Charge (opening Tesla chargers PnC function to many OEMs)
- Reduced database connections by 100x. Reduced latency on 20K+ qps customer facing endpoints from 5.0s to 0.5s.
- Cloud profiles primary backend engineer; MongoDB-backed, end-to-end encrypted
- Re-architect Vehicle List indexing to allow 10*100x (1000x) scaling by parallelizing across lists*vehicles (Elasticsearch, Redis)
- Re-architect OTA update log ingestion to go via Kafka to scale to 100x fleet size; rewrote Ruby to Go
- Zero-downtime upgrade of 5-year-old Elasticsearch
- DevOps (scaling, monitoring, on-call) for 10+ distributed services hosted on multiple regions and clusters of Kubernetes

Appfolio Goleta, CA

Software Engineering Intern

Jun-Sep 2019

- Parallelized core architecture for 50% speedup of tenant screenings, 2nd highest income driver
- Reworked 7 year old core front-end (screenings report) for modern design and legal compliance
- Regenerated PDFs of reports in their original code version (limportant)

Reference: Eric Hawkins

Procore Carpinteria, CA

Software Engineering Intern

Jul-Sep 2018

- 4x Database time reduction at scale (65k+ items)
- 100K+ item, low latency search in npm @particles Select components

Reference: Ben Coffman

Selected Projects

- o Ball bouncing simulator (Java) Gravity balls & explosive balls too
- Navigator (C++)

 A-star algorithm; LA map data

More About

- o Won UCLA's undergraduate writing award (3 of 12,000 win) On the Ethics of Transhuman Relationships
- o I do Wushu (武术) USA Collegiate Wushu Champion

Languages, Tools, Buzzwords

Google • Bash • UNIX • C • C++ • Go • Git • HTML • CSS • JavaScript • MongoDB • Devops • Kubernetes • PostgreSQL • ReactJS • Ruby on Rails • StackOverflow • AWS • Machine Learning • Blockchain • Mentorship

Revised: Apr 25, 2023