

ALAN ORDORICA

Software Engineer | Backend Systems | Cloud & Platform

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Professional Summary

Adaptable software engineer with experience at leading technology companies, focused on backend systems, distributed systems, cloud networking, and test automation. At Google, I helped build gRPC/pub-sub based control-plane components and containerized load tests to catch regressions, expose bottlenecks and shorten releases. I am comfortable navigating ambiguity and enjoy tackling ambiguous problems and shipping pragmatic solutions quickly.

Experience

Google

Software Engineer | Google Cloud SDN Platform

Sunnyvale, CA

May 2022 - Dec 2024

- Owned a gRPC + Pub/Sub load-testing framework (C++/Python) that simulated control-plane behavior at production scale, cutting full regression time by 25% and reclaiming **1.5 SWE-years** annually.
- Architected multicast-controller ↔ VPC-gateway orchestration to mirror production Pub/Sub traffic between thousands of gateway instances and controllers, improving test fidelity with production; expanded system-level coverage and surfaced throughput bottlenecks later fixed by service owners.
- Maintained and scaled the CI/CD load-testing system: provisioned isolated sandboxes, built automated health/auto-recovery monitoring, and scripted metrics collection while continuously expanding test scenario coverage (failovers, rolling upgrades, burst traffic, resharding) across services/regions to expose critical release-pipeline bottlenecks earlier in CI, accelerating developer feedback by **40%** and reducing release-blocking failures by **30%**.
- Migrated legacy, OpenFlow-based live VM migration tests to a more scalable Pub/Sub architecture, boosting total throughput by **20%**, improving resource utilization and reducing test setup/runtimes.
- Drove cross-team code design/reviews and SRE/Dev knowledge shares, which improved on-call triage and accelerated adoption of the test framework across partner teams
- Ramped quickly on Google-internal stack, mapping external paradigms to internal equivalents—Kubernetes → Borg, Docker/containers → internal sandboxes, gRPC → Stubby, SQL → Spanner/BigQuery; contributed to a control-plane simulator that replicates large-scale orchestration events, and to CI load tests, catching regressions pre-prod, during onboarding.

Apple

Tools and Automation Engineer | CI Tools-Site Reliability

Sunnyvale, CA

July 2020 - March 2021

- Deployed 200 test racks (1,000+ devices) and documented host configuration strategies tailored to rack use cases; standardized bring-up and handoff processes that reduced scheduling friction for streamlined lab operations by new techs without escalations.
- Automated provisioning (Python/Bash/Ansible) for firmware flashing and network bootstrap; delivered a repeatable playbook and batch orchestration so racks could be brought online consistently without manual intervention.
- Built Splunk dashboards, alerts, and auto-remediation scripts for device health and job status; reduced MTTD/MTTR by enabling on-call techs to triage from a single pane of glass with documented runbooks
- Defined rack bring-up smoke tests (power, network, device enumeration) and acceptance criteria with SRE/lab ops; ensured racks met production-ready standards before handoff.
- Authored setup docs and remediation runbooks and trained lab techs; improved shift-to-shift continuity and reduced escalations for common failures.

Full Stack Developer

Software Engineer

Remote

January 2020 - Present

- Developed modular React frontend and Node.js backend portfolio web apps with Docker Compose for local orchestration, enabling rapid environment setup.
- Developed Node.js RESTful microservices and ESP32-based automation projects using Python, Bash, and other tools, showcasing proficiency in hardware-software integration and system-level programming.

Technical Skills

Languages: C/C++, Python, JavaScript, Dart, Java, SQL, Bash, JSON, YAML

Cloud & Distributed Systems: GCP, Kubernetes, Docker, gRPC, Protobuf, CI/CD, Microservices, Distributed Systems

DevOps & Build: Ansible, CMake, Git

Libraries & Frameworks: Flutter, React, Next.js, Express.js, ESP-IDF, FreeRTOS

Embedded Systems: ESP32, I²C, SPI, BLE, GDB

Education

San Francisco State University

Bachelor of Science in Computer Engineering

San Francisco, CA

December 2019