

Taylor Wrobel

Playa Vista, CA 90094

✉ recruiting@wrobel.dev • in taylorwrobel • 🌐 twrobel3

Experience

Apple, Inc.

Software Engineering Manager

Culver City, CA

March 2019–Present

- Managing the Platform Test Infrastructure team, a small team focused on providing world class internal tooling within the testing domain to developers across Apple
- Leading development of multiple systems, including a test result data store, email templating service, and BDD style automation test framework
- Meeting with customers to assess needs and feature demand, and structuring product roadmap accordingly
- Engaging in cross functional and company wide initiatives to improve the culture around producing quality software

Apple, Inc.

Software Engineer

Cupertino, CA

April 2016–March 2019

- Lead development of a large scale service responsible for the storage, aggregation, and visualization of test results
- Improved performance of critical path operations by over an order of magnitude through data schema, system architecture, and business logic improvements
- Implemented distributed tracing, monitoring, and alerting for applications within the team's domain
- Designed a new major version of the API to improve consistency and performance and organized its rollout

Aurora Technology, Inc.

CTO and Lead Engineer

San Francisco, CA

September 2014–April 2016

- Founding member of a team working to bring non-predatory automated lending to developing countries
- Designed and implemented a micro-service architecture with focus on scalability, security, and data consistency
- Lead a team of 5 other engineers in writing and deploying a scalable financial services platform
- Enforced good coding practices via required code reviews, documentation, and unit and integration testing

Palantir Technologies

Simulation Software Engineering

Palo Alto, CA

May 2013–September 2014

- Worked with members of the SSE team to address issues of continuous code delivery and code quality via automation
- Lead development on an automated system to validate integrity and completeness of production data
- Maintained and improved the front-end automation regression tests and infrastructure for the Java client

Palantir Technologies

Simulation Software Engineering Intern

Palo Alto, CA

May 2012–May 2013

- Created an internal tool to oversee and manage a cluster of virtual machines used for UI testing
- Improved core testing infrastructure and efficiency through modifications made to architecture and implementation

Highlighted Projects

Test Result Store

Apple, Inc.

Cupertino, CA

- Tech stack included Node.js at the application layer, Cassandra for primary data storage, Redis for caching and eventing, and Blob storage for large file storage
- Scaled service up to 200M assertions ingested per week (250x increase from the time I joined)
- Supported both traditional unit and integration tests, as well as synthetic monitoring test results
- Integrated with a mix of OSS and proprietary systems for logging, tracing, app-to-app communication, and authentication

Highlighted Projects (cont.)

Authentication Proxy

Cupertino, CA

Apple, Inc.

- Go HTTP reverse proxy to transparently handle user authentication against Apple's internal authentication system
- Individually authored during nights and weekends, and voluntarily submitted for information security review
- HMAC signing of user data with mechanisms to mitigate MITM and replay attacks
- Feature rich, including multi-tier caching, rate limiting, tracing, multimodal auth support, logout mechanisms, etc.
- 4th most starred repository on the internal Github Enterprise instance (2nd most starred application, most starred individually authored)
- Actively used by various production and non-production use cases across the company

Education

Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science

2009–2013

Programming Languages and Tools

Proficiency

- Node.js
- Go
- Git
- Java
- OpenSSL
- SQL

Working Knowledge

- HTML and CSS
- Bash
- C/C++
- Groovy
- Python
- L^AT_EX

Skills

Distributed Systems Concepts: Raft, Paxos, CRDTs, CAP/PACELC, 2 Phase Commit

Data Structures: Lists, Trees, Graphs, Hash Tables/Maps, Hash Chains, Heaps, Concurrent Data Structures

Algorithms and Paradigms: Graph Theory, Sorting Algorithms, Concurrency (CSP, Shared Memory, Callbacks)

Data Systems: Cassandra, CockroachDB, Redis, NATS, PostgreSQL, Apache Kafka, SQLite

DevOps Platforms: Kubernetes, Jenkins CI, AWS (EC2, ElasticBeanstalk, RDS, SQS), Zipkin, Splunk, ELK (Elastic-Search, Logstash, Kibana)

Managerial: Nonviolent Communication, Implicit Bias Awareness, Behavioral Interview Experience, Inclusion & Diversity