

David Aoyama

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Sammamish, Washington

EDUCATION

University of Southern California

Master of Science in Engineering Management

Exp. June 2026

Los Angeles, CA

University of Southern California

B.S. in Computer Science and Business Administration

May 2026

Los Angeles, CA

- **GPA:** 3.81 | **Honors:** USC Viterbi Dean's List, USC University Scholarship, Richardson Scholarship, Valentine Scholarship
- **Relevant Coursework:** Advanced Back-End Web Dev, Software Engineering, Algorithms, Data Structures

PROFESSIONAL EXPERIENCE

Software Developer

Gemini

June 2026 – Present

Remote – Seattle, WA

- Reduced alert fatigue by auditing production error classifications, reclassifying self-recovering log events from ERROR to WARN and introducing metric-based monitors that distinguish genuine failures from transient blips
- Managed observability infrastructure as code using **Terraform**, authoring monitor definitions and correcting dashboard metric configurations (aggregation/weighting errors) to ensure alerting accurately reflects real service-availability signals

Software Engineering Intern

Gemini

June 2025 – Aug 2025

Los Angeles, CA

- **Owned** the full-stack development of an internal promotions management tool using **Scala (Play)**, **React**, and **PostgreSQL**, enabling GTM teams to launch campaigns across **10K+ accounts** autonomously
- Engineered a scalable **Redis-backed caching microservice** to resolve experiment variants with sub-100ms latency, supporting high-concurrency A/B testing and improving page load speeds by 25%
- Designed and implemented a fault-tolerant churn re-engagement pipeline using Scala and Braze integration; processed **20K+ inactive users** and drove an 8% lift in reactivation, directly impacting customer retention metrics

Pricing and Estimating Intern

Northrop Grumman

May 2024 – July 2024

Redondo Beach, CA

- Automated critical data ingestion pipelines using **Python and SQL**, processing **10K+ monthly records** and reducing manual reconciliation efforts by 300+ hours/year, demonstrating operational excellence
- Built a self-updating pricing tool consolidating data from 4 disparate sources, improving proposal accuracy by 35% and saving ~\$100K annually
- Collaborated with cross-functional stakeholders to define validation requirements, ensuring 100% compliance with internal audit standards and enhancing data integrity

PROJECTS

Subleasing Application | *Spring Boot, DynamoDB, React, AWS*

- Developed a full-stack housing platform using **Spring Boot** and **DynamoDB (NoSQL)**, deployed on **AWS** to ensure high availability for dynamic housing listings.
- Implemented a roommate-matching algorithm and secure authentication, optimizing the search workflow for USC students.
- Integrated **AWS S3** for optimized image storage and retrieval, reducing server load and enhancing page render speeds for high-resolution property photos.

BERRY | *Next.js, TypeScript, Supabase, PostgreSQL*

- Developed a scalable platform connecting K-12 students with enrichment opportunities, implementing secure role-based authentication and complex admin workflows.
- Designed and integrated RESTful API endpoints and data models in an Agile environment to ship a production-ready platform for LAUSD students.
- Optimized **PostgreSQL** database schemas and implemented indexing strategies, decreasing query execution time by 40% for search-heavy workflows.

Events@USC | *Kotlin, Java, Firebase, Google Maps API*

- Engineered core Android features for event geolocation and user authentication using Firebase and Google Maps API.
- Collaborated in a 4-person Agile team, writing JUnit tests to ensure system reliability and functionality.

TECHNICAL SKILLS

Languages: Java, Python, C++, Scala, JavaScript, TypeScript, SQL, HTML/CSS

Cloud & DevOps: AWS (EC2, Lambda, S3, SQS), Docker, Git, CI/CD, Podman, Bazel, Terraform

Frameworks & Databases: React, Node.js, Spring Boot, PostgreSQL, DynamoDB (NoSQL), Tailwind CSS, Firebase