

# David Aoyama

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Sammamish, Washington

## EDUCATION

### University of Southern California

*Master of Science in Engineering Management*

**Exp. Aug 2026**

*Los Angeles, CA*

### University of Southern California

*B.S. in Computer Science and Business Administration*

**Exp. May 2026**

*Los Angeles, CA*

- **GPA:** 3.8 | **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 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

### Software Engineering Intern

*DeLancey*

June 2023 – Nov 2023

*Los Angeles, CA*

- Developed and deployed six smart contracts on a decentralized marketplace, reducing job posting latency by 30%
- Architected secure API integration flows with cryptographic validation, reducing integration errors by 25% and ensuring scalable deployment for future features
- Conducted comprehensive unit testing and security audits for smart contracts, preventing critical vulnerabilities prior to mainnet deployment

## 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

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