Kevin Amin Omidvaran

Los Angeles, CA | (505) 259-8608 | omidkv@gmail.com | linkedin.com/in/komidvaran/

Software Development Engineer

Software Engineer with over 5 years at Amazon delivering measurable performance improvements across Fire TV, Amazon Music, and Echo devices. Specialized in reducing system latency, scaling distributed architectures, and building real-time data processing pipelines. Known for driving technical excellence through cross-team collaboration and data-driven architecture decisions.

TECHNICAL SKILLS

Languages: Java, C++, TypeScript, Python, SQL
Technology and Other: Lambda, SNS/SQS, DynamoDB, EventBridge, DocumentDB, CloudWatch, ECS-Fargate, S3, Redshift, Aurora React Native, REST, Elasticsearch, CI/CD, Docker, JUnit

PROFESSIONAL EXPERIENCE

Amazon, Los Angeles, CA **March 2020 - Present**
Software Development Engineer II, December 2021 - Present

Amazon FireTV - Launcher Performance and FireTV Vega OS Components
- Owned and delivered launcher latency optimization as Fire TV team member, achieving 1s improvement (25%) through trace analysis and memory optimization to meet critical launch KPIs for Amazon's first VegaOS device (Oct 2025).
- Reduced Fire TV Details page load time by 700ms (20%) through server and device-layer prefetching strategy, improving content browsing performance on VegaOS.
- Led technical direction for multiple contractors, establishing onboarding frameworks, resolving cross-team integration challenges, and empowering autonomous operation on critical delivery milestones.

Amazon Music - Podcast Personalization
- Built and launched configurable duration-based recommendation system using Elasticsearch filtering and batch processing, increasing podcast listening engagement across 12 territories through rigorous A/B testing and iteration.
- Identified critical personalization bottleneck, proposed and drove cross-team optimization (new API, caching, database indexing) that reduced episode retrieval latency 35% (200ms to 130ms p95).
- Implemented DMA-compliant authentication for real-time push notification system, integrating transitive auth tokens across asynchronous workflow components to meet EU regulatory requirements.

Amazon Distribution Center Technologies - Core Inventory Service
- Designed event-driven Warehouse Management Accounting Service using AWS (SNS, SQS, Lambda, Redshift) for real-time inventory tracking, enabling facility migration from pilot to 800K+ items.
- Mentored SDE interns through the full project lifecycle from scoping to delivery, resulting in return offers and team adoption of their work.

Software Development Engineer I, March 2020 - December 2021
- Debugged and fixed memory leaks degrading Echo device performance, improving visual ring response latency by 10x and enhancing KPI measurement accuracy.
- Refactored and externalized Asset Manager to AVS-SDK by abstracting Amazon-specific dependencies, enabling third-party Alexa devices to dynamically download wake word models and audio assets without firmware updates.

Taco Bell, Irvine, CA **March 2019 - December 2019**
Software Engineering Intern Menu Middleware
- Developed ETL pipelines with Airflow and AWS (ECS, Lambda) to generate menu data and monitor operations across nationwide Taco Bell locations.

EDUCATION

Master of Science M.S. Computer Science
University of California, Irvine, CA

Bachelor of Science B.S. Computer Science minor in Economics
University of New Mexico, Albuquerque, NM