

JIGNAMODI

SOFTWARE DEVELOPMENT ENGINEER

JIGNA537@GMAIL.COM | +14802058678

PROFESSIONAL SUMMARY

Senior Software Development Engineer with 10+ years of experience leading complex technical initiatives at Amazon. Specializes in architecting scalable RAG-based knowledge management systems, AI-driven accessibility solutions, and AI-powered agent-based developer platforms that accelerate how builders ship customer-facing experiences, while driving cross-team collaboration with applied scientists, product and CX stakeholders, as well as mentoring engineering teams.

SKILLS

Leadership: Technical Design, Project Management, Agile Methodology, Process Improvement, Mentorship

Architecture: Agentic AI, Microservices, Distributed Systems, AWS, CI/CD, Infrastructure-As-Code

Technology: GenAI, RAG, MCP tools, AWS Bedrock, Kendra, LangChain, Java, TypeScript, JavaScript, React, React Native, Kotlin, Angular

PROFESSIONAL EXPERIENCE

SOFTWARE DEVELOPMENT ENGINEER III, AMAZON | DECEMBER 2025 - PRESENT

Led strategy and delivery of an AI-native authoring platform that transforms how engineers take customer-facing storefront experiences from intent to production readiness.

- Launched an AI-native development platform — MCP tools backed by an indexed knowledge base, embedded in IDE assistants — delivering live framework guidance, reusable-component discovery, and automated code generation that compressed feature delivery on Amazon.com from **3–4 weeks to 2–3 days**, now adopted by **200+ builders**.
- Architected an open agent registry enabling teams to build, publish, and customize composable AI agents for their specific frameworks and use cases — turning a single-framework tool into a multi-framework ecosystem where one team's solution is discoverable and reusable by the next.
- Led **2 engineering teams (15+ engineers)**, driving technical direction and org-wide adoption of AI-assisted development.

SOFTWARE DEVELOPMENT ENGINEER III, AMAZON | MARCH 2023 - NOVEMBER 2025

*Architected AI-driven accessibility solutions using Agentic AI patterns and centralized knowledge management, supporting **100+ teams** in automated remediation of accessibility violations across Amazon's ecommerce platform.*

- Improved Accessibility Agent **accuracy** by **40%** through advanced RAG architecture and centralized knowledge management, establishing foundational infrastructure for automated accessibility systems.
- Led cross-functional collaboration with Applied Scientists, ML engineers, Product Managers, and stakeholders to deliver AI-driven accessibility solutions from concept to deployment.
- Built the first-ever accessibility metrics framework for Amazon stores customers, measuring shopping effort across mobile and web to establish performance baselines and track purchase conversion.
- Led and mentored **15+ engineers** across **3 teams** for GenAI adoption program to efficiently deliver highly available systems.

SOFTWARE DEVELOPMENT ENGINEER III, AMAZON | SEPTEMBER 2021 – MARCH 2023

*Re-architected documentation platform solution supporting **40+ teams** across Amazon.*

- Led complete platform re-architecture achieving **600% adoption growth**, reducing onboarding time from **days to under 30 minutes**.
- Led 4-engineer team to successfully migrate 40+ documentation sites using one-click automation, achieving zero downtime during transition.

SOFTWARE DEVELOPMENT ENGINEER II, AMAZON | MAY 2019 - SEPTEMBER 2021

Led development of critical HR systems and process improvements.

- Designed unified solution measuring data staleness across People Engine services supporting both legacy and new HCM systems.

- Implemented foundational architecture for migrating **100+ employee-related integrations** from Oracle HCM, optimizing data delivery and reducing errors across critical systems like badging, payroll.
- Built consensus across multiple teams for streamlined solution while maintaining data accuracy.

SOFTWARE DEVELOPMENT ENGINEER II, AMAZON | DECEMBER 2017 - MAY 2019

Led technical initiatives protecting Amazon's brand integrity and preventing counterfeit product listings.

- Designed catalog completeness verification system processing millions of product listings.
- Successfully coordinated with various teams to optimize workflows and maintain data integrity.

SOFTWARE DEVELOPMENT ENGINEER I, AMAZON | JULY 2015 - DECEMBER 2017

Developed critical components of Amazon's seller-facing inventory management systems.

- Worked on desktop and mobile applications for managing Seller's product inventory.
- Designed and implemented solution for fixing multi-valued attribute errors enhancing product listing accuracy.
- Reduced latency and fatal errors for desktop and mobile inventory pages by **40%**.

EDUCATION

M.S. COMPUTER SCIENCE, ARIZONA STATE UNIVERSITY | GRADUATED MAY 2015

- GPA: 3.56/4.0
- Key Coursework: Design And Analysis of Algorithm, Intro to Theory of Computation, Software Security

B.E. COMPUTER SCIENCE, MAHARAJA SAYAJIRAO UNIVERSITY, VADODARA, INDIA | GRADUATED MAY 2011

- GPA: 3.73/4.0
- Key Coursework: Software Engineering, Data Structures, Advanced Database Technologies, Object Oriented Programming (C++), Computer Architecture