Arjun Shekar Bharadwaj

Software Development Engineer with 10+ years of experience in backend development and a strong AWS background.

Experience

2019-Current

Software Development Engineer, Amazon Lab 126, Sunnyvale

Experienced software engineer leveraging my expertise in large-scale distributed system design, cloud technologies and data-driven development to build highly available, scalable microservices with AWS on Java, Python frameworks for cross-team initiatives.

- O Rearchitected the Target Recommendation Service
 - Spearheaded the re-architecture of a critical service using *structural and behavioral design patterns* for enhanced efficiency and maintainability.
 - Implemented core product components, enabling the use of business metrics to support data-driven decision making.
 - Demonstrated expertise in system design, scalability, and the development of metrics-driven solutions.
- O Space based targeting for 3P Smart-home Devices
 - Designed and implemented a scalable rule engine to optimize smart-home device targeting.
 - Reduced operational costs by 50% through service call optimization, demonstrating resourcefulness and focus on efficiency.
 - Demonstrated strong problem-solving skills in a complex, data-driven environment.
- Launch Vega Family of Devices
 - Collaborated with cross-functional teams (device software, video, middleware) to launch new OS –
 Vega for media playback.
 - Designed solutions that mitigated latency degradation and reduced scaling costs, demonstrating focus on performance and cost optimization.
 - Showcased the ability to work effectively across teams to deliver a complex product launch.
- O LLM Prompt Engineering for Alexa Endpoint Context Service
 - Engineered a system to enhance LLM (*Large Language Model*) action generation using Langchain, minimizing the need for extensive fine-tuning.
 - Developed a few-shot prototype to improve context handling, resulting in increased LLM robustness.
 - Successfully integrated multiple service with LLMs by chaining APIs together.

2015–2019 Software Development Engineer, Amazon Development Centre India, Bengaluru Led development and management of Seller onboarding microservices for Amazon.in launch.

- O Launch of Out of Country Merchants in India
 - Designed international merchant registration pipeline, accelerating India market expansion.
 - Enhanced multiple customer touchpoints with precomputation and caching, reducing latency.
- O AWB and Commercial Invoice Generation
 - Built invoice generation service, integrating AWS SQS for real-time order processing.
 - Streamlined audit workflows with automated SFTP invoice transfer to Deutsche Bank.
 - Ensured compliance and streamlined financial processes with secure invoice generation.

Education

2013–2015 Master of Technology (M.Tech), IIIT-B, India, CGPA: 3.70/4.00

Major: Information Technology

2007–2011 Bachelor of Engineering (B.E), RVCE, India, CGPA: 9.00/10.00

Major: Computer Science and Engineering

Skills

Languages Java, JavaScript, Python

Cloud AWS (SQS, SNS, Lambda, DynamoDB, Athena)

Frameworks Spring, Coral, AUI, Angular, jQuery

Data Integration AWS Data pipeline, Datamart

LLMs/GenAI Langchain, MagentaSDK