

Arjun Shekar Bharadwaj

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

Experience

2024–Present

Senior Software Engineer, Microsoft Azure, Mountain View

Sr. Software engineer specializing in cloud-native compute platforms and streaming data architectures, building *scalable, fault-tolerant solutions* for batch and streaming workloads using Kubernetes, Apache Airflow, and open-source technologies within the Azure Resource Builder team.

- Azure Compute Platform for Streaming and Batch Jobs
 - Architected compute platform supporting streaming/batch processing using Kubernetes and Apache Airflow, integrating RisingWave, Spark, and Flink
 - Designed seamless interfaces with Azure Event Hubs (Kafka) and Storage Accounts for data ingestion
- Dynamic Runtime Deployment & AI Evangelism
 - Built customized container solution for dynamic NuGet package management and *zero-downtime deployments*
 - Championed AI tools adoption: MCP servers, SWE Agents, and custom prompts for development workflows

2019–2024

Software Development Engineer, Amazon Lab 126, Sunnyvale

Experienced software engineer leveraging expertise in large-scale distributed system design and data-driven development to build *highly available, fault-tolerant, scalable microservices* and *AI-powered platforms* with AWS using Java and Python frameworks for cross-functional initiatives.

- AI-Powered Customer Engagement Platform & Action APIs
 - Architected *AI-powered platform* (MCP Server) for Alexa+ enabling optimal device targeting for customer content delivery across Music, News, Video domains globally
 - Engineered *LLM-based system* using Langchain with prompt engineering and few-shot learning, supporting millions of customer interactions daily
- Target Recommendation Service & Scalability Engineering
 - Spearheaded re-architecture using structural and behavioral design patterns, *reduced operational costs by 50%* through query optimization and batching
 - Built *scalable, fault-tolerant rule engine* for global customer base, led Q4 readiness with load testing and capacity planning, collaborating with cross-functional teams
- Vega OS Launch & Cross-functional Technical Leadership
 - Led *working group of 20+ stakeholders* across device, video, and middleware teams to deliver Vega OS support, ensuring system reliability at scale
 - Drove consensus through Principal Engineer collaboration and design reviews, mitigated latency issues and reduced scaling costs for global deployment

2015–2019

Software Development Engineer, Amazon Development Centre India, Bengaluru

Led development and management of Seller onboarding microservices for Amazon.in launch.

- Designed international merchant registration pipeline for India market expansion, enhanced customer touchpoints with caching
- Built invoice generation service, integrating AWS SQS for real-time processing and automated SFTP workflows to Deutsche Bank

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, C#, Haskell

Cloud Platforms

AWS (SQS, SNS, Lambda, DynamoDB, Athena), Azure (Event Hubs, Storage Accounts, Container Apps)

Container & Orchestration

Kubernetes, Docker, Azure Container Registry

Frameworks & APIs

Spring, Coral, AUI, Angular, jQuery, Proto + gRPC

Data & Messaging

AWS Data pipeline, Datamart, Kafka, Apache Airflow

AI & ML

Langchain, LLM Integration, Prompt Engineering, Few-shot Learning, AI-powered Platforms, MCP Servers, MagentaSDK