

# Arjun Shekar Bharadwaj

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arjunswaj

*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 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 comprehensive *compute platform* supporting *streaming/batch processing* using *Kubernetes orchestration* and *Apache Airflow*
  - Integrated multiple *compute engines*: *RisingWave, Hosted Spark Clusters, Apache Flink*
  - Designed seamless interfaces with *Azure Event Hubs (Kafka)* and *Azure 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, cloud technologies* and *data-driven development* to build highly available, scalable *microservices* with *AWS* on *Java, Python* frameworks for cross-team initiatives.

- Alexa+ Action APIs & AI Integration
  - Created *Action APIs (MCP Server)* for Alexa+ to target optimal devices for content rendering across domains
  - Engineered *prompt engineering solutions* for target determination in *Music, News, Video* domains for *Playback, Resume, Transport Control*
  - Developed *LLM system* using *Langchain* with *few-shot prototypes* for enhanced context handling
- Target Recommendation Service & Smart-home Targeting
  - Spearheaded re-architecture using *structural and behavioral design patterns* for enhanced efficiency
  - Built scalable rule engine for device targeting, *reduced operational costs by 50%* through optimization and *data-driven metrics*
- Vega OS Launch
  - Collaborated across teams (device, video, middleware) to launch Vega OS, *mitigated latency* and *reduced scaling costs*

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, MagentaSDK, Prompt Engineering, LLM Integration, Few-shot Learning, MCP Servers