## Arjun Shekar Bharadwaj

Software Development Engineer with 9+ years of experience in full-stack development and a strong AWS background.

## Experience

2019–Current

Software Development Engineer, Amazon Lab 126, Sunnyvale

Engineer highly available, scalable systems on AWS with Java, Python for cross-team initiatives.

- O LLM Prompt Engineering for Alexa Endpoint Context Service
  - Demonstrated LLM action generation with Langchain, reducing fine-tuning.
  - Built few-shot prototype to address missing context, enhancing robustness.
  - Improved LLM accuracy to 80% without additional fine-tuning.
  - Integrated service with LLMs (ChatGPT, Claude 2, Alexa GM 100B).
- $\odot$  Space based targeting for 3P Smart-home Devices
  - Enhanced smart-home device targeting with scalable AWS rule engine.
  - Optimized service calls, reducing costs by 50%, improving scalability.
- Rearchitected the Target recommendation service
  - Rearchitected service using structural and behavioral design patterns.
  - Implemented product components, including business metrics for data-driven decisions.

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 touch points 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

LLMs/GenAI Langchain, MagentaSDK, HuggingFace APIs

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

Frameworks Spring, Coral, AUI, jQuery

Data Integration AWS Data pipeline, Datamart