VIVEK BHAT

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**Summary**

AWS-certified Solutions Architect and Developer with 7+ years of experience working closely with customers to gather requirements and deliver scalable, high-impact software solutions. Skilled in leading agile teams, solving complex technical challenges, and writing clean, maintainable code.

**Core Technical Competencies**

**Programming** Java, Python, JavaScript, Go, TypeScript, Angular, Ansible, NodeJS, SQL, Terraform

**Tools & Utilities** AWS, Kafka, Flink, Git, Docker, Kubernetes, Gradle, Elasticsearch, Logstash, Kibana

**Operating Systems** Linux, Unix, Windows, WSL, Macintosh

**Certifications** MIT Applied Data Science Program,AWS Solutions Architect, AWS Software Developer

**Professional Experience**

## HUGHES, Maryland, Sr Software Engineer Nov 2023 – Present

## Collaborated with customers to capture requirements, architect scalable solutions, and drive end-to-end software delivery, including deployment and ongoing maintenance.

## Implemented best practices for a greenfield project, including AWS VPC design, IAM policies, Kafka integration, Terraform-based infrastructure, and observability systems.

## Led the implementation of software development best practices, including AWS VPC architecture, IAM policy design, Kafka integration, infrastructure using Terraform, and observability systems.

## Built real-time data stream processing engine using Apache Flink to detect satellite internet communication issues globally, reducing triage time from an average of 2 days to near real-time.

## Developed tools with AWS Bedrock and vector embeddings to calculate cosine similarity, which enhanced the accuracy and efficiency of manual labeling from days to hours.

## Engineered a service to identify weather-impacted customers, cutting triage time by 90%.

## Analyzed network issue trends and business impact and built ML training pipelines in collaboration with data scientists and subject matter experts to classify and predict satellite internet network issues.

## Engineered an Avro Schema Registry enabling seamless schema resolution and backward compatibility, streamlining data serialization across distributed systems.

## Mentored new engineers to accelerate onboarding and productivity.

## Optimized AWS infrastructure monitoring, reducing costs by 65%.

## AMAZON, Seattle, WA, Software Development Engineer June 2022 – Oct 2023

## Led the design, development, and deployment of highly scalable software solutions and microservices.

## Automated Amazon Same-Day Delivery catalog refresh, reducing update time by 12 hours, improving data freshness, and eliminating manual effort.

## Proactively refactored system logic to remove redundant API checks to an external service, improving efficiency and reducing latency.

## Developed an AI/ML-powered “Frequently Bought Together” widget, driving $110K+ in revenue.

## Spearheaded the development of a high-throughput inventory catalog service, slashing ticket numbers by 20% and improving data freshness by over 10 hours.

## Engineered CI/CD infrastructure design, complete with monitoring, anomaly detection, and alarms.

## Played a pivotal role in 24/7 on-call rotations, addressing cross-team production challenges.

## Oversaw extensive online feature experiments, leveraging feature flags (A/B tests) and production traffic.

## Built automated ETL pipelines to deliver ML-driven data to Amazon widgets.

## MICROSOFT, Redmond, WA, Software Development Engineer June 2021 – June 2022

## Spearheaded the global device management microservice, enhancing seamless device interactions.

## Developed and implemented a system to dynamically execute Python scripts and manage dependencies for a vast network of routers.

## Established KPIs and monitoring tools for emerging services overseeing thousands of devices.

## Participated in 24/7 on-call rotations to troubleshoot production issues across cross-functional teams.

## Conducted deep-dive root cause analyses for production incidents, for long-term stability improvements.

## Reduced new device configuration time by 50% through advanced caching optimizations.

## Migrated internal APIs to a new in-house platform, enhancing maintainability, performance, and integration consistency across services.

## INTEL, Oregon, Software Development Engineer January 2018 – June 2021

## Designed and deployed a scalable Java Spring Boot microservice to efficiently orchestrate Spark job execution within a Hadoop ecosystem.

## Boosted data throughput three times by integrating Apache NiFi for high-performance, reliable data transfer across distributed systems.

## Built and deployed the POC for Apache NiFi on premises servers to demonstrate the workload processing.

## Deployed a POC for Apache NiFi on on-prem servers to highlight scalable workload processing.

## Built robust CI/CD pipelines tailored to client requirements using Java, Docker, Gradle, and GitHub Workflows, accelerating deployment cycles.

## Led end-to-end development of a full-stack solution, collaborating with stakeholders to deliver a responsive Angular UI backed by Java APIs.

## Integrated secure user authentication using AWS Cognito, enabling seamless sign-up and sign-in experiences.

## Implemented a centralized logging and monitoring solution using the ELK stack (Elasticsearch, Logstash, Kibana), improving observability and issue resolution.

## INTEL, Software Engineering Summer Intern May 2017 – Aug 2017

## Engineered Intel Saffron’s Java-based REST API for AI services, integrating advanced security protocols and complex classification and recommendation modules.

## Collaborated with stakeholders and customers to refine and enhance REST API functionality based on evolving requirements and feedback.

## Developed an Ansible playbook to automate the deployment of AI services on AWS, reducing setup time by 90% and improving deployment consistency.

**Education**

**North Carolina State University, Raleigh, NC, USA Aug 2016 – Dec 2017**

MS in Computer Science

**Jamia Millia University, New Delhi, India June 2012 – July 2016**

Bachelor of Technology in Electronics and Communication Engineering