

HARSHA

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SUMMARY

Experienced Software Engineer with 7+ years of experience delivering **cloud-native distributed systems, backend platforms, and large-scale data solutions**. Proficient in **Java | Python | React | AWS | Azure | GCP**, specializing in **microservices, event-driven design, real-time streaming, and data pipelines**. Strong track record in **system design, CI/CD automation, observability, and secure coding practices**. Experienced mentor and collaborator, driving **scalable, high-availability solutions** in Agile/SAFe environments.

TECHNICAL SKILLS

Languages: Java(Core & Advanced) | Python | JavaScript | TypeScript | Go | SQL | Bash | C# | Ruby on Rails | ASP.NET

Backend & APIs: Spring Boot | Hibernate | Node.js | Express | REST APIs | GraphQL | gRPC | .NET Core

Frontend: React | Redux | Next.js | Responsive UI | WCAG Accessibility | HTML | CSS

Cloud & DevOps: AWS (EC2 | Lambda | API Gateway | S3 | DynamoDB | RDS | CloudWatch | EKS) | Azure (AKS | Functions | Cosmos DB | Key Vault) | GCP (GKE | Cloud Run | Pub/Sub | BigQuery) | Docker | Kubernetes | Terraform | Jenkins | GitHub Actions | Argo CD

Distributed Systems: Microservices | Event-Driven Architecture | CQRS | Saga | Outbox | Load Balancing | Auto-Scaling | Service Mesh (Istio) | Circuit Breakers | Resilience4j

Databases & Data Stores: PostgreSQL | MySQL | MongoDB | Cassandra | Redis | Snowflake | Amazon Neptune | Neo4j

Streaming & Messaging: Apache Kafka | Kafka Streams | Kinesis | RabbitMQ | Pub/Sub | WebSockets

Data Engineering: Spark | Flink | CDC (Debezium) | Airflow | ETL/ELT | Data Lake | Parquet/Avro/ORC

Testing & Quality: JUnit | Mockito | Cypress | Selenium | Pact | Testcontainers | JMeter | LoadRunner | TDD | BDD

Observability: OpenTelemetry | Prometheus | Grafana | Splunk | New Relic | ELK

Security & Compliance: OAuth 2.0 | OIDC | JWT | TLS/mTLS | IAM | KMS | Secrets Manager | SAST | DAST | SCA

WORK EXPERIENCE

Software Engineer II | Express Scripts(End Client: Apple Inc) | Jan 2023 – Present | USA

- Designed and implemented **cloud-native microservices** using **Spring Boot, Java, and Kafka**, deployed on **AWS EKS**, to support millions of requests daily with high scalability. Introduced async I/O and Redis caching, which reduced latency by ~30% and improved throughput during peak transaction loads.
- Developed **REST and GraphQL APIs** for critical product workflows, applying schema governance and contract testing (Pact) to enforce backward compatibility. This eliminated integration failures across 15+ dependent services and streamlined external partner onboarding.
- Led the adoption of **event-driven architecture** with Kafka, applying Outbox and Saga patterns to achieve reliable, exactly-once message delivery. Implemented dead-letter queues and retry mechanisms, reducing lost or duplicated events by over 90% in distributed environments.
- Built and managed **CI/CD pipelines** using GitHub Actions, Jenkins, and AWS CodePipeline to support automated builds, tests, and deployments. Integrated canary and blue/green strategies, reducing deployment risks and cutting average release times from 2 hours to less than 20 minutes.
- Championed **application security and compliance**, integrating OAuth 2.0, OIDC, JWT, and mTLS into services. Automated secrets rotation through AWS Secrets Manager and enforced IAM least-privilege policies, passing multiple internal security audits without major findings.
- Introduced **observability practices** using OpenTelemetry, Prometheus, Grafana, and New Relic. Designed actionable dashboards and service-level objectives (SLOs) that cut alert fatigue by 40% and enabled proactive performance tuning, improving customer-facing SLAs.
- Optimized **system performance and resilience** through JVM tuning, JMeter load testing, and zero-downtime schema migrations (Flyway/Liquibase). Increased P95 API response times from ~320ms down to ~180ms under sustained high traffic without scaling additional compute.
- Mentored a team of 4 engineers, conducted in-depth design/code reviews, and led **SAFe PI planning workshops** with product managers, QA, and designers. Improved feature delivery predictability while embedding best practices into the team's engineering culture.

Software Development Engineer I | Broad Ridge(End Client: Apple Inc) | May 2018– Dec 2022 | India.

- Built a **scalable multi-tenant e-commerce platform** using React, Node.js, and MongoDB with secure payment integrations and RBAC authorization. Optimized client performance with SSR and CDN tuning, which increased page load performance by 25% and conversion rates by 15%.
- Automated infrastructure provisioning using **Terraform and CloudFormation**, containerizing workloads with Docker and orchestrating deployments through AWS ECS/EKS. Delivered a resilient environment with autoscaling and failover mechanisms, achieving ~99.99% uptime across customer-facing applications.
- Developed **serverless APIs** using AWS Lambda and API Gateway to handle asynchronous workflows such as notifications, image processing, and log enrichment. This reduced infrastructure costs by 25% and improved service reliability for bursty workloads.
- Designed a **real-time analytics pipeline** combining AWS Kinesis, DynamoDB Streams, and GraphQL dashboards. Enabled product managers to access near-real-time insights (sub-minute latency) into transaction volumes, inventory flows, and customer behaviors.

- Enhanced the testing and quality framework with **JUnit, Cypress, and Selenium**, integrating coverage thresholds into CI/CD pipelines. Increased automated test coverage from 45% to 80%, cutting post-release defects by 35% and accelerating feedback cycles.
- Built centralized **logging and monitoring systems** using CloudWatch and ELK, with actionable runbooks for support teams. Reduced mean time to acknowledge and resolve incidents by 30% while improving transparency with structured log correlation.
- Partnered with design teams to deliver **WCAG AA accessibility compliance**, ensuring inclusivity across the e-commerce product. Optimized front-end Lighthouse scores across performance, accessibility, and SEO, increasing customer satisfaction and engagement.
- Actively contributed to **Agile ceremonies** including sprint planning, retrospectives, and backlog refinement. Collaborated across product and QA to slice large epics into incremental deliverables, consistently meeting sprint commitments and reducing release slippages.

EDUCATION

Masters in Computers and Information Science

Southern Arkansas University

Magnolia, AR

Relevant courses: Cloud Computing, Machine Learning, Advanced Data Structures & Algorithms, Database

CERTIFICATIONS

- Microsoft Certified: Azure Data Engineer Associate
- Snowflake SnowPro Core Certified
- AWS Certified Solutions Architect – Associate
- Google Cloud Professional Data Engineer
- Certified Kubernetes Administrator (CKA)
- Oracle Certified Java SE 11 Developer