Akula Shashidhar

Chicago, IL | akulas1493@gmail.com | (312) 772-5526 | linkedin.com/in/akula-s-163349224 | akulaengineering.pages.dev

EDUCATION

Trine University Jan 2023
Masters, *Information Systems*

Avanthi college Jan 2018
Bachelors, *Computer Science and Electronics*

SKILLS

Programming Languages: Java 17, Python, TypeScript, JavaScript (ES6+), SQL, PL/SQL, OAuth 2.0, OpenID Connect, Data Structures & Algorithms

Frameworks & Libraries: Spring Cloud Gateway, Spring Batch, Hibernate, Resilience4j, Apache Kafka, JMS, RabbitMQ, React 18 (Hooks, Context API, React Query), Angular 14, Spring WebFlux, Spring Data JPA, OpenAPI/Swagger, Redux, Junit 5 (Jupiter), Mockito, Cypress, REST Assured, Servlets, JSF, Struts, JPA, Mybatis, Spock, Mocha, Jasmine, Spring Security, Spring Boot 3, ExpressJS, Jersey

Databases: MySQL, PostgreSQL (Amazon RDS, Multi-AZ), Redis (ElastiCache), MongoDB, MariaDB, DB2, MS SQL Server, Snowflake, Hive

Tools & Software: Eclipse, Spring Tool Suite, Docker, Kubernetes (Helm, Ingress), Terraform, Git, GitHub, Selenium, JMeter, Maven, Gradle, AWS Lambda, SNS, Fluentd, Splunk, Log4J, Prometheus, Grafana, Confluence, Chef, Ansible, JIRA, AWS CodeDeploy, SonarQube, Unleash, Postman, WCAG 2.1, CVS, SVN, Sauce Labs, ANT, Fugue, Access Tokens, ID Tokens, Refresh Tokens

Cloud Platforms: AWS (EKS, ECS, S3, RDS [PostgreSQL Multi-AZ], ElastiCache [Redis], SQS, Cognito, Certificate Manager, CloudWatch, X-Ray, Auto Scaling, Batch, VPC, Route 53, CloudFormation, Terraform), Azure (internal load balancers, Traffic Manager, governance tools), AWS Beanstalk

Soft Skills: Leadership, Mentoring, Collaboration, Code Review, Design Review, Debugging, Disaster Recovery Planning, Incident Management

WORK EXPERIENCE

Liberty Mutual | Sr Full Stack Java Developer Aug 2025 -

- Designed and implemented project infrastructure to initiate development of enterprise-grade applications using Java and Spring Boot, contributing to software development across the full delivery lifecycle.
- Developed and consumed RESTful Web Services using Spring Boot, handling JSON data exchange between front-end and back-end systems; participated in structured construction, automation, and debugging activities.
- Designed and implemented scalable REST APIs using Spring Boot to support Angular front-end functionality, ensuring robust and reusable software components.
- Developed dynamic and responsive web applications using Angular and TypeScript, improving performance and user experience; actively reviewed code and participated in design review sessions to uphold software quality and functional accuracy.
- Integrated Angular front-end applications with Spring Boot microservices to ensure seamless data exchange and dependable operations.
- Built full-stack applications using Angular (TypeScript), Java, Spring Boot, and MySQL, demonstrating proficiency across multiple programming languages and applying distributed programming concepts to service interaction.
- Developed microservices using Spring Boot, providing complete CRUD operations with MySQL database integration, applying appropriate data structures for efficient in-memory and persistence handling.
- Implemented data persistence using MySQL, writing complex SQL queries, stored procedures, and performance-optimized queries.
- Configured and managed database connectivity using Spring Data JPA and JDBC for MySQL integration.
- Migrated legacy Java applications to modern Spring Boot microservices architecture, improving maintainability and scalability and supporting recurring functional integration and regression testing.

- Deployed and managed Java Spring Boot applications on AWS (EC2, Elastic Beanstalk), optimizing for cost, scalability, and performance while monitoring systems capacity.
- Configured AWS EC2, Elastic Beanstalk, CloudWatch, and EFS for high availability and monitoring.
- Implemented AWS infrastructure provisioning and environment setup for multiple applications, following change and incident management standards.
- Designed and implemented CI/CD pipelines using GitHub Actions, enabling automated build, test, and deployment workflows and automated test scripts.
- Successfully migrated CI/CD pipelines from Bamboo to GitHub Actions, reducing build times and improving deployment efficiency.

Walmart | Java Full Stack Developer Dec 2023 - Jul 2025

- Designed and implemented RESTful microservices using Java 17 and Spring Boot 3, following a domain-driven approach to manage inventory and order workflows, and contributing to the technical architecture and design of high-performance, scalable components.
- Developed JWT-based authentication and authorization for all backend endpoints with a working knowledge of OAuth 2.0 and OpenID Connect, handling access tokens, ID tokens, and refresh tokens to ensure secure access control across services.
- Built and consumed REST APIs with Spring WebFlux and Spring Data JPA, integrating with a MySQL database for transaction processing and applying appropriate data structures for scalable data handling.
- Implemented CI/CD pipelines using Jenkins and GitHub Actions for automated build, test, and deployment stages; containerized services with Docker; automated test scripts to support functional integration and regression testing.
- Deployed microservices to AWS (EKS/ECS), configuring Kubernetes manifests (Helm charts) and AWS IAM roles for fine-grained access control.
- Collaborated with the front-end team to deliver a responsive UI using React 18 (hooks, functional components) and integrated with backend APIs via Axios; maintained parts of the UI in Angular 14 for legacy modules.
- Leveraged Kubernetes (EKS) for service discovery and pod orchestration; configured Ingress Controller to expose application endpoints and manage SSL termination.
- Monitored application health with AWS CloudWatch and integrated Prometheus for custom metrics collection, enabling proactive incident detection and resolving frequently encountered technical issues.
- Wrote unit and integration tests using JUnit 5, Mockito, and Spring Test, achieving over 80% code coverage; incorporated SonarQube checks into the CI pipeline to maintain software quality and functional accuracy.
- Participated in daily Scrum ceremonies and structured code review and design review sessions, collaborated with Product Owners to refine backlog items, and conducted peer code reviews to uphold coding standards.
- Implemented circuit breaker and retry patterns using Resilience4j to improve microservice resilience and reduce cascading failures during high-traffic inventory updates.
- Designed API contracts with OpenAPI/Swagger, enabling automatic documentation generation and client SDK support for downstream teams.
- Configured AWS SQS queues for decoupled communication between order-processing and fulfillment services, ensuring reliable message delivery under peak loads.
- Automated infrastructure provisioning with Terraform, managing EKS clusters, IAM policies, and networking resources in a declarative, version-controlled manner.
- Integrated AWS S3 for storing bulk product images and feeding CDN endpoints, optimizing asset delivery for the React-based storefront.
- Enhanced front-end state management in React 18 by leveraging Context API and React Query to cache API responses, reducing unnecessary network calls and improving perceived UI performance.
- Migrated legacy inventory-reporting modules from AngularJS to Angular 14, modularizing components and services to align with current code standards and improve maintainability.
- Deployed AWS CodeDeploy hooks in the CI/CD pipeline to perform blue/green deployments, minimizing downtime during service updates.

- Implemented role-based access control (RBAC) on the React dashboard using JWT claims, restricting UI elements and API access based on user permissions.
- Utilized AWS CloudWatch Logs and X-Ray for distributed tracing, diagnosing latency bottlenecks across microservices and participating in debugging and operational troubleshooting.
- Leveraged Apache Kafka for real-time event streaming between order and analytics microservices, enabling low-latency sales metrics processing and downstream reporting and applying distributed programming concepts.
- Implemented Spring Cloud Gateway as a centralized API gateway, providing request routing, rate limiting, and common filtering logic across all backend services.
- Configured AWS RDS (PostgreSQL) with Multi-AZ deployments, optimized schema design and indexing strategies to support high-volume transaction processing with sub-50 ms query times.
- Utilized Redis ElasticCache to cache frequently accessed product catalog and pricing data, reducing database load and improving API response times by approximately 40%.
- Developed daily batch jobs using Spring Batch, orchestrated via AWS Batch, to generate inventory reconciliation reports and synchronize legacy data lakes.
- Integrated the ELK Stack (Elasticsearch, Logstash, Kibana) to centralize logs from all microservices, building custom dashboards for error rate monitoring and transaction throughput visualization.
- Configured AWS Cognito for user pool management, MFA enforcement, and secure JWT issuance, streamlining authentication flows for the React-based admin portal; supported the architecture of OAuth 2.0 and OpenID Connect flows for token-based identity.
- Enforced HTTPS/TLS across all publicly exposed endpoints by provisioning certificates with AWS Certificate Manager on an Application Load Balancer (ALB), ensuring end-to-end encryption.
- Set up AWS Auto Scaling policies for EKS worker nodes and ECS tasks based on CPU and memory metrics, maintaining optimal resource utilization during peak shopping periods and monitoring systems capacity.
- Wrote JMeter performance test scripts to simulate high-concurrency order placements, identifying thread-pool and connection-pool bottlenecks in Spring Boot services.
- Applied Liquibase for database version control, automating schema migrations across Dev, QA, and Prod environments, and enabling safe rollback during deployment failures.
- Enhanced the Jenkins CI pipeline by integrating SonarQube quality gates and vulnerability scans, enforcing 80%+ code coverage and zero critical security findings on each merge.
- Integrated Sentry for real-time error tracking in both backend and frontend, providing actionable alerts for unhandled exceptions and reducing mean time to repair (MTTR) by 25%.
- Implemented feature toggles with Unleash, allowing controlled rollouts of new features in production and facilitating A/B testing without additional code branches.
- Created accessible, responsive React components following WCAG 2.1 guidelines, ensuring keyboard navigation and ARIA attributes for the inventory management dashboard.
- Documented architectural decisions, API designs, and deployment procedures in Confluence, improving cross-team knowledge sharing and onboarding efficiency.
- Participated in disaster recovery planning and disaster recovery activities alongside the infrastructure team, validating restore procedures and runbook execution for critical services.
- Adhered to change and incident management standards, owning incident resolution, root-cause analysis, and post-incident documentation for production systems.
- Contributed to proof-of-concept initiatives evaluating emerging technologies for scalability and total cost of ownership, and provided technical input on design and lifecycle management of services.

INFINX PVT | Java Full-Stack Developer Feb 2021 - Jan 2022

- Extensive experience developing applications using Java and related technologies with Waterfall and Agile Scrum methodologies, demonstrating proficiency in multiple programming languages.
- Proficient in GUI development using Java Swing, JSP, Struts, JSF, AJAX, JavaScript, HTML, DHTML, and CSS.
- Migrated applications to a microservices architecture using Spring Boot, ReactJS, and AWS, applying distributed programming concepts across service boundaries.

- Collaborated with product owners, architects, and data scientists to design and implement scalable technical solutions aligned with business requirements.
- Worked on Finacle Core Banking Solution, customizing workflows, integrating with enterprise applications, and optimizing database performance.
- Automated batch processing using Unix Shell Scripting, reducing manual intervention by 30% and improving execution efficiency.
- Developed and maintained shell scripts for log analysis, monitoring jobs, and managing file transfers across Linux/Unix-based environments.
- Utilized Chef and Ansible for infrastructure as code (IaC) to automate server configuration and deployment processes, ensuring consistency and reducing manual errors.
- Developed and maintained Chef cookbooks and Ansible playbooks to automate the setup and management of development, staging, and production environments.
- Monitored and optimized production workloads using AWS CloudWatch, Prometheus, and Grafana, resolving frequently encountered technical issues with minimal assistance.
- Led efforts to transition legacy applications to microservices architecture, ensuring high performance and scalability using Spring Boot, ReactJS, and AWS.
- Integrated test automation into CI/CD pipelines to ensure deployment quality and minimize regressions, automating test scripts for functional and regression coverage.
- Automated incident response workflows using AWS Lambda & SNS for alerting and remediation, contributing to incident management and operational reliability.
- Implemented real-time log aggregation and analysis using Fluentd, Splunk, and Log4J to track application performance and troubleshoot issues, strengthening debugging practices.
- Maintained and enhanced user interfaces for single-page applications using AngularJS and TypeScript, delivering seamless customer experiences.
- Implemented CI/CD pipelines for automated build, testing, and deployment, ensuring efficient software delivery with minimal manual intervention.
- Maintained Confluence knowledge base with architecture diagrams, deployment strategies, and troubleshooting guides.
- Worked closely with the security team to implement secure cloud infrastructure using AWS services, including IAM policies and access control.
- Designed and implemented MVC architecture with AngularJS, Angular4, and TypeScript.
- Developed and tested RESTful APIs and microservices using Spring, Hibernate, and Jersey, participating in structured design review and code review sessions.
- Deployed Spring Boot microservices in Docker and AWS EC2 containers using Jenkins.
- Built and managed Hadoop EMR clusters on AWS with Big Data tools like Spark, Kafka, and Hive, applying distributed programming concepts at scale.
- Configured and optimized AWS services including EC2, S3, RDS, EBS, ELB, and Auto Scaling groups.
- Used AWS Beanstalk to deploy and scale web applications and services.
- Collaborated with product owners, architects, and data scientists in agile sprints to deliver secure, scalable solutions aligned with business objectives.
- Developed responsive, single-page applications using Angular, Bootstrap, and ES6.
- Built automation templates with AWS CloudFormation and Fugue for managed services.
- Worked on Kafka message partitioning and replication in cluster setups.
- Integrated and analyzed Hadoop clusters using tools like Flume, Oozie, Zookeeper, and Sqoop.
- Developed RESTful web APIs with Spring and tested them using Postman.
- Enhanced legacy AngularJS apps by migrating to Angular4 with improved responsiveness.
- Designed UI components with HTML5, CSS3, JSON, and Angular libraries.

- Implemented SOAP-based XML Web Services for remote and global financial transactions.
- Optimized API Gateway capabilities with enhanced security features for B2B clients.
- Optimized database queries and data pipelines for Snowflake and PostgreSQL, enhancing data retrieval efficiency by 20%.
- Oversaw architectural design decisions, ensuring alignment with IT standards and compatibility across the microservices ecosystem.
- Worked on Azure services, including internal load balancers, Traffic Manager, and governance tools.
- Designed and developed N-tier architecture Restful APIs for scalable web applications.
- Participated in disaster recovery planning and disaster recovery exercises, validating backup and restore workflows for critical banking services.
- Adhered to change and incident management standards for production deployments, owning post-incident reviews and corrective actions.

OPTUM | Java Developer May 2019 - Jan 2021

- Proficient in developing JAX-WS, JAX-RPC, and REST Web Services clients and exposing existing Java components as Web Services using SOAP, WSDL, and UDDI.
- Expertise in Core Java and J2EE technologies, including JSP, Servlets, JSTL, JMS, Struts, Spring, Hibernate, EJB, and Java Beans, demonstrating proficiency in core programming languages.
- Experienced in object-oriented analysis, design, and development using Java and J2EE, applying data structures and algorithms to meet functional requirements.
- Extensive knowledge of core Java concepts such as polymorphism, inheritance, serialization, synchronization, and exception handling.
- Skilled in frameworks like Struts, JSF, Hibernate, and Spring with additional plug-ins like Tiles Framework and Validators Framework.
- Utilized Chef and Ansible for infrastructure as code (IaC) to automate server configuration and deployment processes, ensuring consistency and reducing manual errors.
- Implemented automation scripts using Chef and Ansible to manage server configurations and streamline the deployment process, reducing deployment time and minimizing human error.
- Proactively identified and mitigated technical risks, ensuring seamless deployment and minimal system disruptions.
- Led efforts to automate testing and build processes, contributing to faster release cycles and reduced errors, including automating functional integration and regression test scripts.
- Strong experience with ORM/DAL tools such as Hibernate and MyBatis, and SQL/PL-SQL programming.
- Developed portals using HTML5, CSS, LESS, JSON, AJAX, and React JS, integrating server-side technology with Node JS.
- Took ownership of designing and implementing secure web services (REST/SOAP) to support business needs, ensuring high performance and security.
- Mentored junior team members, guiding them in best practices for coding, testing, and deployment, and contributing to code review and design review practices.
- Expertise in using JSF, Spring-Batch, and JPA frameworks for front-end, business, and persistence layers.
- Built Single Page Applications (SPAs) with ReactJS, Redux, JSX, Form Validation, HOC, and react-router.
- Proficient in using JavaScript for UI components like editable dropdowns and data-driven menu customizations.
- Utilized middleware like Body-parser in Express.js to handle HTTP POST data.
- Skilled in ETL processes, including data extraction, transformation, and loading from diverse data sources like Excel, flat files, and Oracle to SQL Server databases using SSIS.
- Experienced in creating PL/SQL procedures and functions to facilitate ETL processes.
- Developed data warehouses with Hive and integrated DWH-ETL solutions with Hadoop, applying distributed programming principles.

- Designed normalized databases and created database objects such as tables, views, stored procedures, UDFs, indexes, and rules in MS SQL Server.
- Authored JUnit test cases to validate REST services and employed frameworks like Spock, Mocha, and Jasmine for unit and integration testing.
- Implemented server-side tasks using Spring MVC and XML configurations.
- Leveraged SOAP protocol with JAX-WS, integrating Apache CXF and AXIS-2 for WS-Remote Messaging, WS-Security, and WS-Policy specifications.
- Used Eclipse IDE for developing JSPs, Servlets, and Struts applications, with Tomcat server for development.
- Configured JMS for messaging with queues and topics on WebLogic 10.3 and integrated them into applications.
- Hands-on experience with version control systems like CVS, SVN, and GIT.
- Conducted cross-browser and cross-platform testing using Selenium Grid and Sauce Labs.
- Automated build and deployment processes using ANT and MAVEN in Jenkins for multi-environment support.
- Contributed to incident management processes by owning root-cause analysis and resolution for production issues, and participated in disaster recovery planning and recovery exercises for healthcare data services.