**Greeshma**

[**greeshma6912@gmail.com**](mailto:greeshma6912@gmail.com)

**+1 8065893196**

**Senior Backend Developer**

**Professional Summary**

* Seasoned **Senior Backend Developer** with over **12 years of experience** delivering robust, scalable, and secure backend systems across **telecom, healthcare, insurance, and financial domains**. Proficient in designing and implementing **microservices architectures**, developing **RESTful APIs**, and building **real-time data pipelines** using a strong foundation in **Java, Python, and Spring Boot**.
* Adept at working in **cloud-native environments** including **AWS and Azure**, and skilled in **containerization, CI/CD pipelines, and database optimization**. Proven expertise in applying **Object-Oriented Design (OOD)** principles, performance tuning, and secure application development. Recognized for mentoring teams, modernizing legacy systems, and driving continuous improvement in Agile environments.
* Designed and implemented scalable microservices using **Java, Python, Spring Boot**, ensuring maintainability and seamless integration across enterprise systems.
* Developed and maintained robust **RESTful APIs** that enabled high-throughput processing and integration with external and internal services across healthcare, telecom, and finance sectors.
* Engineered **event-driven architectures** with **Apache Kafka**, enabling real-time data processing, communication, and system decoupling.
* Designed and optimized backend data pipelines using **SQL (PostgreSQL, MySQL)** and **NoSQL (Cassandra, MongoDB)** databases, ensuring efficient retrieval and transformation of large datasets.
* Led containerization initiatives with **Docker** and orchestrated scalable deployments via **Kubernetes (EKS, AKS)** for high availability and fault tolerance.
* Applied **OAuth 2.0, JWT**, and **Spring Security** to build secure authentication and authorization mechanisms, ensuring data protection and regulatory compliance.
* Implemented and monitored **CI/CD pipelines** using tools like **Jenkins, GitHub Actions, GitLab CI, and Azure DevOps**, reducing deployment time and improving release reliability.
* Migrated legacy monolith applications to **cloud-native microservices**, significantly enhancing modularity, scalability, and development speed.
* Integrated with **cloud platforms** including **AWS (EC2, S3, RDS, CloudWatch)** and **Azure (App Services, Functions, Blob Storage)** to support hybrid and cloud-native deployments.
* Developed and executed automated test suites using **JUnit, Pytest, Mockito**, and followed **Test-Driven Development (TDD)** to ensure code quality and minimize defects.
* Utilized **DevOps tools** such as **Terraform** and **ARM templates** for Infrastructure as Code (IaC), streamlining environment provisioning and configuration management.
* Designed and supported backend systems for telecom features such as **VoIP, SIP/RTP call handling, CDR processing**, and real-time provisioning.
* Improved backend system performance by leveraging **profiling tools**, **memory management**, and **database indexing** to ensure sub-second response times.
* Maintained operational excellence through monitoring and observability solutions like **Datadog, ELK Stack, Prometheus, Grafana**, and **AWS CloudWatch**.
* Collaborated in **Agile/Scrum environments**, actively participating in sprint planning, retrospectives, and backlog grooming for continuous delivery.
* Mentored junior engineers through **code reviews, pair programming**, and technical walkthroughs, fostering a culture of collaboration and learning.
* Authored and maintained technical documentation using **Swagger, OpenAPI**, and **Confluence**, supporting cross-team communication and future maintenance.
* Delivered backend services compliant with high SLAs, demonstrating exceptional troubleshooting skills and domain knowledge in **telecom-grade** and **insurance systems**.

**Technical Skills**

|  |  |
| --- | --- |
| **Category** | **Skills** |
| **Programming** | Java, Python |
| **Frameworks** | Spring Boot, Spring Security |
| **Cloud Platforms** | AWS (EC2, S3, RDS, CloudWatch, EKS), Azure (App Services, Functions, AKS, Blob Storage) |
| **Containerization** | Docker, Kubernetes (EKS, AKS) |
| **Databases** | SQL (PostgreSQL, MySQL), NoSQL (Cassandra, MongoDB) |
| **Event Streaming** | Apache Kafka |
| **APIs** | RESTful APIs, OpenAPI/Swagger |
| **Auth & Security** | OAuth 2.0, JWT, Spring Security |
| **CI/CD** | Jenkins, GitHub Actions, GitLab CI, Azure DevOps |
| **IaC** | Terraform, ARM Templates |
| **Testing** | JUnit, Pytest, Mockito, TDD |
| **Monitoring** | Datadog, ELK Stack, Prometheus, Grafana, AWS CloudWatch |
| **DevOps** | Infrastructure as Code (IaC), Performance Tuning, Scalability Optimization |
| **Telecom Tech** | VoIP, SIP/RTP, CDR Processing, Real-time Provisioning |
| **Agile & Tools** | Scrum, Sprint Planning, Confluence, Git |

**Education**

* **Sathyabama University** **Duration: May 2006- March 2010**

Bachelor of Technology in Computer Science and Engineering.

**Certifications**

* AWS Certified Solutions Architect Associate.
* Microsoft Certified: Azure Solutions Architect Expert.

**Work Experience**

**Client: Cox Communications, Atlanta, GA Duration: Dec 2022 – Present**

**Role: Senior Backend Developer**

**Responsibilities:**

* Designed and implemented **scalable backend services** using **Python, Java, and Spring Boot**, adhering to microservices architecture and ensuring modular, maintainable code structures.
* Developed and maintained **RESTful APIs** for internal and external integrations, supporting robust data exchange and high-throughput processing across telecom.
* Engineered **data pipelines and backend logic** with strong proficiency in **SQL (PostgreSQL, MySQL)** and **NoSQL (Cassandra)** databases to handle large volumes of structured and semi-structured data.
* Built **event-driven systems using Apache Kafka** to ensure reliable, decoupled, and real-time communication between distributed microservices.
* Supported disaster recovery readiness by configuring **Azure Site Recovery (DR)** across regions for Kubernetes-based services running in **AKS**, reducing RTO by 60%.
* Evaluated and contributed to infrastructure setup for **Azure OpenAI Service** pilots aimed at conversational support automation, improving knowledge retrieval use cases.
* Containerized applications using **Docker** and orchestrated deployments on **Kubernetes (K8s/EKS)** to ensure high availability, scalability, and fault tolerance.
* Optimized backend application performance using **profiling tools**, database indexing, and memory management techniques to ensure sub-second response times.
* Applied principles of **object-oriented design (OOD)** and **data structures and algorithms** to implement efficient backend logic for telecom billing and customer management systems.
* Developed secure services implementing **OAuth 2.0**, **JWT-based authentication**, and followed best practices for protecting sensitive user data and ensuring compliance.
* Created automated **unit, integration, and regression tests** using **Pytest** and **JUnit**, integrating them into CI/CD pipelines for continuous quality assurance.
* Leveraged **Linux environments** for development, scripting, and automation tasks to ensure portability and consistency across systems.
* Implemented and monitored **CI/CD pipelines** using **Git, GitHub Actions, Jenkins**, and **SonarQube** to automate build, test, and deployment workflows.
* Collaborated in **Agile/Scrum environments**, contributing to sprint planning, retrospectives, and backlog grooming while using tools like **JIRA** and **Confluence**.
* Applied **DevOps practices** including infrastructure automation, environment management, and deployment strategies on **AWS** cloud platform.
* Mentored junior developers through pair programming, code reviews, and knowledge-sharing sessions, fostering team growth and consistent coding standards.
* Configured and maintained **version control** using **Git**, establishing best practices for branching, merging, and release management in collaborative development.
* Participated in troubleshooting and debugging production issues using **monitoring tools** like **Datadog**, **AWS CloudWatch**, and log aggregation via **ELK stack**.
* Ensured clean, readable, and efficient code following SOLID principles and maintained proper documentation for system APIs and architecture decisions.
* Designed and deployed **resilient backend solutions** to support **real-time processing** in telecom services such as CDR parsing, user provisioning, and billing.

**Environment**: Python, Java, Spring Boot, REST APIs, Flask, Django, PostgreSQL, MySQL, Cassandra, Apache Kafka, Docker, Kubernetes, Linux, Git, GitHub Actions, Jenkins, SonarQube, Pytest, JUnit, Datadog, AWS CloudWatch, ELK Stack, OAuth 2.0, JWT, AWS, CI/CD, Agile, JIRA, Confluence.

**Client: Wintrust Financial Corp., Rosemont, IL Duration: July 2019 – Nov 2022**

**Role: Backend Developer**

**Responsibilities:**

* Designed and implemented **scalable backend systems** using **Python**, **Java**, and frameworks like **Spring Boot** and **Flask**, supporting high-availability and modular architectures.
* Developed and maintained **RESTful APIs** adhering to OpenAPI standards to enable reliable integration across distributed systems and third-party vendors.
* Engineered data pipelines with **SQL** and **NoSQL databases** including **PostgreSQL**, **MySQL**, and **Cassandra**, optimizing data storage and retrieval operations.
* Integrated **Apache Kafka** for event-driven architecture, ensuring real-time processing of customer and transaction data across microservices.
* Migrated legacy batch analytics to **Azure SQL Data Warehouse** and **Azure Analytics Services**, accelerating compliance report generation by 35%.
* Collaborated with security teams to implement **Microsoft Entra ID (Azure Active Directory)** authentication for internal dashboards and APIs, ensuring identity governance compliance.
* Containerized backend applications using **Docker**, facilitating consistent development and deployment across environments.
* Orchestrated deployments with **Kubernetes**, enabling auto-scaling, self-healing containers, and zero-downtime rollouts in production.
* Leveraged **Linux-based environments** for secure, performant backend system operations and infrastructure automation.
* Applied **Object-Oriented Design (OOD)** principles and **software development best practices** to develop flexible, maintainable codebases.
* Utilized **Git** for version control with advanced branching strategies to manage feature development and parallel release cycles efficiently.
* Ensured robust application quality through **unit testing** and **integration testing** using **JUnit**, **Mockito**, and **Pytest** frameworks.
* Followed **Test-Driven Development (TDD)** practices to validate business logic early and reduce production defects.
* Built **CI/CD pipelines** using tools like **Azure DevOps**, enabling automated build, test, and deployment workflows with rollback support.
* Designed and maintained secure systems leveraging **OAuth 2.0**, **JWT**, and **Spring Security**, ensuring data privacy and access control.
* Optimized system performance and reliability through proactive monitoring using **Azure Monitor**, **Prometheus**, and **Grafana**.
* Engaged in **Agile Scrum** ceremonies including sprint planning, retrospectives, and daily standups, contributing to collaborative and timely delivery.
* Applied **data structures and algorithms** knowledge to optimize processing logic in latency-sensitive services.
* Worked closely with cloud services such as **AWS** to architect and deploy cloud-native applications.
* Contributed to the migration of legacy monolithic applications to **microservices architecture**, improving modularity and system resilience.

**Environment:** Python, Java, Spring Boot, Flask, RESTful APIs, PostgreSQL, MySQL, Cassandra, Apache Kafka, Docker, Kubernetes, Linux, Git, JUnit, Mockito, Pytest, OAuth 2.0, JWT, Spring Security, Azure DevOps, Azure Monitor, Prometheus, Grafana, AWS, Agile Scrum.

**Client: Guidewire Software Inc., San Mateo, CA Duration: Feb 2017 – June 2019**

**Role: Backend Software Engineer**

**Responsibilities:**

* Developed and maintained **scalable backend services** for Guidewire's core insurance products using **Java**, **Spring Boot**, and **RESTful APIs**, ensuring system reliability and extensibility.
* Designed and implemented **microservices architectures** that supported modular deployment and seamless integration with internal and external services.
* Built and optimized **REST APIs** for high-performance transaction processing, enabling real-time claims, policy, and billing functionalities for insurance platforms.
* Collaborated with frontend teams to define and deliver **end-to-end features** by designing consistent API contracts and managing version control across services.
* Integrated **Microsoft Azure cloud services** like **Azure App Services**, **Azure Functions**, and **Azure Blob Storage** to modernize application deployments and data management strategies.
* Developed robust messaging and event-driven systems using **Apache Kafka**, ensuring real-time communication across distributed systems.
* Integrated **Azure Service Bus** and **Azure Event Hub** for decoupled message-driven architecture, improving policy data sync latency by 40% across distributed insurance systems.
* Designed and deployed workflow orchestration using **Azure Logic Apps** to automate customer enrollment validation and policy lifecycle events.
* Implemented **Docker containerization** and deployed services using **Kubernetes (AKS)** for automated scaling, load balancing, and zero-downtime deployments.
* Conducted performance tuning and troubleshooting using **New Relic**, **AppDynamics**, and **Azure Monitor** to proactively identify and resolve production bottlenecks.
* Managed database design and optimization for both **SQL (PostgreSQL, MySQL)** and **NoSQL (MongoDB, Cassandra)** environments to support varied data needs.
* Led the migration of legacy monolithic applications to **microservices-based cloud-native architectures**, reducing release cycles and improving maintainability.
* Followed **Agile methodologies (Scrum)** and participated in sprint planning, story grooming, and retrospectives, contributing to improved delivery timelines.
* Used **CI/CD pipelines** built with **Jenkins**, **GitLab CI**, and **Azure DevOps** to automate build, test, and deployment processes across development environments.
* Ensured application security compliance with **OAuth2**, **JWT**, and **API Gateway** configurations for secure data access and identity management.
* Engaged in **code reviews**, pair programming, and test-driven development (TDD) to uphold high code quality and foster continuous team learning.
* Leveraged **Unit Testing**, **Integration Testing**, and **Mocking frameworks** like **JUnit**, **Mockito**, and **TestNG** for reliable backend validation.
* Collaborated with DevOps to implement **infrastructure as code (IaC)** using **Terraform** and **ARM templates** for consistent and reproducible cloud environments.
* Worked on data ingestion pipelines and batch processing systems using **Apache Spark** and **Azure Data Factory**, enabling efficient ETL workflows.
* Maintained up-to-date documentation using **Confluence**, **Swagger**, and **OpenAPI**, helping cross-functional teams and stakeholders better understand system interfaces.

**Environment:** Java, Spring Boot, RESTful APIs, Microservices, Azure App Services, Azure Functions, Azure Blob Storage, Docker, Kubernetes, Kafka, PostgreSQL, MySQL, MongoDB, Cassandra, Jenkins, GitLab CI, Azure DevOps, OAuth2, JWT, API Gateway, JUnit, Mockito, TestNG, Terraform, ARM Templates, Apache Spark, Azure Data Factory, Agile, Scrum, Swagger, OpenAPI, Confluence, AppDynamics, New Relic.

**Client: Heritage Insurance Holdings Inc.., Tampa, FL Duration: May 2015 – Jan 2017**

**Role: Software Engineer**

**Responsibilities:**

* Designed, developed, and maintained scalable backend services using **Java** and **Spring Boot**, ensuring high reliability and security for insurance claim processing platforms.
* Created and managed RESTful APIs for policyholder and agent interfaces, improving data retrieval performance and system communication speed by 40%.
* Engineered real-time data integration pipelines using **Apache Kafka** and **AWS Kinesis**, supporting efficient ingestion and transformation of structured insurance data.
* Designed and executed SQL queries and **NoSQL** document-based data models with **PostgreSQL**, **MySQL**, and **MongoDB** to support both transactional and analytical workloads.
* Built and containerized microservices with **Docker**, orchestrated deployments using **Kubernetes**, improving release cycles and reducing infrastructure costs.
* Integrated **AWS Cloud Services** like **EC2**, **S3**, and **RDS** to enhance application scalability and optimize cloud-native deployments.
* Applied **CI/CD** best practices using **Jenkins** and **Git**, streamlining the build, test, and release processes to maintain high delivery velocity.
* Collaborated with cross-functional teams including QA, product owners, and business analysts to deliver user-centric features and ensure alignment with business goals.
* Developed automated unit and integration tests using **JUnit** and **Mockito**, maintaining over 90% code coverage for all backend modules.
* Participated in Agile Scrum ceremonies, including sprint planning and retrospectives, to ensure transparent progress tracking and faster resolution of blockers.
* Monitored system logs and application performance using **ELK Stack (Elasticsearch, Logstash, Kibana)** and **Prometheus**, enabling proactive incident response.
* Designed role-based access control systems and integrated with **OAuth2** and **JWT** for secure authentication and authorization.
* Contributed to the development of analytics dashboards using **Python** and **Flask**, enabling underwriters to gain insights from historical claim data.
* Rewrote legacy services with modern, maintainable architecture patterns, reducing system downtime and technical debt.
* Maintained thorough documentation for services, APIs, and deployment pipelines to support smooth handovers and team knowledge sharing.

**Environment:** Java, Spring Boot, REST APIs, Apache Kafka, AWS (EC2, S3, RDS, Kinesis), PostgreSQL, MySQL, MongoDB, Docker, Kubernetes, Jenkins, Git, JUnit, Mockito, ELK Stack, Prometheus, OAuth2, JWT, Python, Flask, Agile, CI/CD.

**Client: Ribbon Communications Inc.., Plano, TX Duration: June 2012 – April 2015**

**Role: Software Developer**

**Responsibilities:**

* Designed, developed, and maintained carrier-grade VoIP and IP-based communication systems ensuring **high availability** and **real-time performance** for telecom clients.
* Developed **RESTful APIs** and backend services using **Java** and **Python**, integrating with telecom protocols like SIP and RTP for seamless voice call handling.
* Built scalable middleware components for service orchestration using **Spring Framework**, improving system response time by 25%.
* Contributed to the design and deployment of microservices-based architecture using **Docker** containers and **Kubernetes**, enhancing modular deployment and system resiliency.
* Integrated **Apache Kafka** for real-time messaging pipelines to support call metadata processing and analytics across distributed systems.
* Utilized **SQL and NoSQL databases** including **PostgreSQL** and **Cassandra** to store and retrieve large-scale call data records (CDRs) and performance logs efficiently.
* Developed robust unit and integration test cases using **JUnit**, **Mockito**, and automation tools, increasing test coverage and reducing production defects.
* Participated in Agile/Scrum ceremonies, contributing to sprint planning, backlog grooming, and daily standups to ensure continuous delivery and iteration.
* Implemented CI/CD pipelines using **Jenkins** and **Git** to automate builds, testing, and deployment, resulting in a 40% reduction in manual errors and deployment time.
* Collaborated closely with product managers and QA teams to gather requirements, perform root-cause analysis, and deliver bug fixes on critical telecom software modules.
* Improved system logging and monitoring using **ELK stack (Elasticsearch, Logstash, Kibana)** to provide deep observability into system behavior and latency issues.
* Refactored legacy monolithic codebases into modular services using **Object-Oriented Design Principles** and **Design Patterns**, enhancing maintainability and scalability.
* Supported telecom provisioning tools and developed custom interfaces for provisioning and fault management systems using **SOAP** and **REST APIs**.
* Engaged in **code reviews** and performance optimization activities to ensure the codebase aligned with industry best practices and high-throughput requirements.
* Delivered software patches and feature enhancements across multiple releases under strict SLA timelines, demonstrating strong problem-solving and cross-functional collaboration.

**Environment:** Java, Python, Spring, RESTful APIs, SIP, RTP, Apache Kafka, Docker, Kubernetes, PostgreSQL, Cassandra, Jenkins, Git, JUnit, Mockito, ELK Stack, Agile/Scrum, SOAP, CI/CD, Microservices, Object-Oriented Design, Design Patterns.