Tejaswini Kasinadhuni

Houston, TX
+19452660060 tejaswinikasinadhuni@gmail.com https://www.linkedin.com/in/tejaswini-kasinadhuni/

Summary

Software Development Engineer with 3 years of experience in designing and building web applications using Python, Java/J2EE and modern front-end frameworks like AngularJS and ReactJS. Proven track record in developing RESTful web services with Spring Boot, containerizing applications with Docker and Kubernetes, and leveraging AWS for scalable infrastructure. Adept at implementing CI/CD pipelines and ensuring high code quality through automated testing. Seeking to leverage expertise to drive innovative solutions in a dynamic development team.

Education

University of Houston **Jan 2023 - Dec 2024**
Master of Science in Computer and Systems Engineering *Houston, TX*

Skills

- **Programming Languages**: Java, Python, JavaScript (ES6+), TypeScript, C++, C, .NET(C#), PHP, Data Structures and Algorithms
- **Java Technologies**: JSP, JDBC, Servlets, EJB, JPA, Java Beans
- **Web Development Technologies**: HTML5, CSS3, JavaScript, AngularJS (Angular 13), React.js (React 18), jQuery, Bootstrap 5, Express.js, Node.js, AJAX, JSON, NPM, Yarn
- **Frameworks**: Spring (Spring Framework 6), Hibernate, JSF, Struts, Apache CXF, Apache Camel, Log4J
- **Servers**: IBM WebSphere, Apache Tomcat (Tomcat 10), JBoss
- **Design Patterns**: MVC, Front Controller, Singleton, Data Access Object, Observer, Factory method
- **Version Control**: GIT (Git 2.35), SVN, TFS
- **Networking**: System administration and troubleshooting operating system (Linux and/or Windows) and networking, HTTP/s, TCP/IP, DNS, OSI model, routing, switching, firewalls, LAN/WAN, traceroute
- **IDE**: Eclipse (Eclipse 2021), VS Code (VS Code 1.65), IntelliJ (IntelliJ IDEA 2021), Spring Tool Suite (STS 4)
- **Databases**: Oracle (Oracle 19c), IBM DB2 (DB2 11), MySQL (MySQL 8), MS SQL Server (SQL Server 2019), MongoDB(MongoDB 5), Amazon RDS, Redshift
- **Build Tools**: Gradle (Gradle 7), Jenkins (Jenkins 2), Maven (Maven 3.8), SonarQube (SonarQube 9)
- **Platforms**: Windows, Mac, UNIX, LINUX, AWS, Microsoft Azure, Google Cloud Platform
- **Cloud Computing**: AWS, Microsoft Azure, Google Cloud Platform, Microservices, Kubernetes (Kubernetes 1.23), OpenShift Container Platform (OCP)
- **Performance Monitoring**: Prometheus (Prometheus 2), Grafana (Grafana 8), ELK stack (Elasticsearch 7, Logstash 7, Kibana 7)
- **Functional Programming**: Scala (Scala 3), Kotlin (Kotlin 1.6)

Work Experience

University of Houston **Feb 2023 - Present**
Graduate Assistant *Houston, TX*

- Led design and implementation of scalable microservices architecture, leveraging AWS services (EC2, Lambda, ECS/Fargate), achieving 20% cost reduction and 30% scalability increase
- Developed and deployed 10+ RESTful APIs using AWS Lambda for serverless functions, achieving fast response times and exceeding SLAs by 15%
- Integrated React.js for dynamic UI, ensuring an intuitive user experience
- Enhanced test coverage by 30% through automated testing frameworks, leading to a 50% reduction in production defects.
- Achieved 95% code coverage in unit tests, ensuring exceptional code quality and a 40% decrease in regression issues, leveraging AWS testing tools.
- Orchestrated CI/CD pipelines with AWS CodePipeline, optimizing resource utilization and improving deployment efficiency
- Utilized AWS CloudWatch for real-time monitoring, reducing incident response time by integrating into on-call rotation
- Successfully resolved 100+ production incidents with <15 minutes resolution time, adhering to robust incident management processes.
- Methodically documented design decisions and implementation details, fostering internal knowledge-sharing and onboarding with AWS documentation tools.
- Conducted knowledge-sharing sessions, enhancing team processes and aligning with AWS principles
- Implemented performance optimization techniques, leveraging AWS cost optimization tools, ensuring scalability and reliability with 30% infrastructure cost reduction
- Adopted serverless architecture, reducing operational overhead by 40% and enhancing scalability by 50%, aligning with AWS Well-Architected Framework principles

Tata Consultancy Services **Aug 2021 - Dec 2022**
Software Development Engineer *Hyderabad, India*

- Led the migration of legacy Java applications from JSP to React, reducing page load times by 40% and improving user satisfaction.
- Utilized Spring Boot to develop over 20 RESTful web services, adhering to industry best practices and standards.
- Automated API testing pipelines using Postman, Newman, and RestAssured, enhancing CI/CD efficiency by 30% .
- Adopted DevOps practices by utilizing Git for version control, Jenkins for continuous integration, and Kubernetes on OpenShift for container orchestration, reducing deployment times by 50% .
- Developed and maintained backend services in Java and Scala, ensuring 99.9% uptime for USAA's credit card applications.
- Implemented testing strategies, including unit, integration, and end-to-end testing with JUnit and ScalaTest, achieving 95% code coverage and ensuring code quality with SonarQube
- Designed and implemented Kafka-based solutions for message queuing and stream processing, enhancing data accuracy and processing speed by 25%
- Integrated Nexus and SonarQube for artifact repository management and continuous code quality inspection, resulting in high-quality deliverables
- Developed performance-critical components in Rust, leveraging its memory safety and concurrency features to enhance application performance and reliability.
- Collaborated cross-functionally to gather requirements, define project scope, and deliver solutions aligned with business objectives within Agile methodologies.
- Implemented Datadog for monitoring and visualization of application and infrastructure metrics, identifying and resolving performance bottlenecks, improving application reliability by 20%

Cognizant Technology Solutions **Jan 2021 - Jul 2021**

Software Engineer Intern *Hyderabad, India*

- Collaborated with cross-functional teams to align development efforts with business objectives, resulting in enhanced project outcomes and improved team efficiency
- Redesigned user interface, boosting user engagement by 25% and garnering positive stakeholder feedback.
- Designed and maintained a scalable microservices architecture using Spring Cloud and Docker containers, ensuring modularity and facilitating future scalability.
- Developed high-performance web applications using Java technologies (Spring Boot, Spring MVC, Hibernate), ensuring reliability and scalability.
- Integrated front-end components seamlessly with back-end services through RESTful APIs and AJAX, optimizing client-server communication efficiency.
- Leveraged Python for automation, streamlining repetitive tasks, and enhancing team productivity.
- Implemented robust data encryption-at-rest using Google Cloud KMS to meet stringent security compliance standards.
- Deployed authentication and authorization mechanisms (OAuth 2.0, JWT) to fortify APIs and protect sensitive data.
- Led automated performance testing in the CI/CD pipeline, reducing post-deployment issues by 75%
- Orchestrated seamless migration of on-premises applications to Google Cloud Platform, reducing infrastructure costs by 40% and bolstering scalability.
- Managed projects using Jira, ensuring timely delivery and effective team collaboration, resulting in improved project completion rates
- Leveraged Linux environments, SQL databases, shell scripting, and blue/green deployment strategies, resulting in streamlined development and deployment processes
- Utilized Confluent for seamless event streaming, enhancing data processing capabilities and enabling real-time analytics
- Established a mentorship program within the development team, reducing code defects by 30% and enhancing overall code quality and maintainability.

Projects

Railway Management System **Jan 2024 - May 2024**

- Developed using Python(Flask) and MySQL
- Providing features for staff to add trains, view all trains, delete trains, and view all bookings
- User-friendly interface styled using Bootstrap

Automated Seating Arrangement System **Apr 2024 - Jun 2024**

- Developed an automated seating system for educational institutions
- Designed backend with C# and ASP.NET Core, and frontend with Angular
- Implemented seating algorithms and integrated Entity Framework for database management
- Deployed on Azure, enhancing scalability and reliability