**SHASHANK PENUKONDA**

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**SUMMARY**:

* Software Developer with around **8** years of extensive experience as an API Web Developer in Web-Designing, User Interface development, integrating, and implementing of highly transactional and scalable web applications using web technologies.
* I have gained experience in designing, developing, testing, supporting applications in large scale Micro-Service architecture using Java 11, J2EE, Spring/Spring Boot, Splunk, Hibernates, Cassandra, Oracle, Kafka, Kubernetes, Docker, Jenkins, AWS, Python programming and interactive, asynchronous UI pages using JavaScript (ES6), jQuery, AJAX, HTML, CSS on working in telecom, finance projects
* Involved in all the phases of software development life cycle (SDLC), such as Analysis, Designing, Developing, Integrating, Implementing, and testing of Client-Server and Web-based applications.
* Experience in developing web content, having the Web Content Accessibility Guidelines (WCAG) and browser compatibility with W3C standards.
* Expertise in debugging and troubleshooting the code using Firebug, IE Tester, and Chrome Developer Tools and exposure on compatibility issues with different versions of browsers.
* Design & implement cross-browser compatible web application using Handlebar templates, CSS,
* Involved in writing application-level code to interact with APIs, Web Services using JSON and XML.
* Performed unit testing using Jasmine and Karma, along with integration testing Chrome Inspector to fix bugs and worked closely with QA
* Experience in relating the User Interface to underlying objects models using the MVC (model view Controller) design pattern.
* Expertise in using XML, JSON and AJAX to link with back-end applications.
* Strong experience with Cross Browser Compatibility issues and Optimization for web, including CSS Sprites and best practices.
* Creating TypeScript reusable components and services to consume REST API's using component-based architecture provided by Angular 8.
* Expertise L2 and L3 production support by resolution within the timeline.
* Good knowledge on cloud AWS services like EC2, Lambda, S3, Cloud watch, Beanstalk, CloudWatch and Trail
* Hands-on experience working on NoSQL databases including Cassandra, MongoDB and HBase.

**TECHNICAL SKILLS:**

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| **Languages** | C, CPP, Java (1.6, 1.7, 1.8,11, 17), SQL, PL/SQL, Shell Scripting |
| **Enterprise Java** | Servlet, JSP, JDBC, JSTL, Data structures. |
| **Mark-up/XML /UI Technologies** | HTML, HTML5, XSLT, JavaScript, Dojo, CSS, CSS3, XML, XSD, AJAX, jQuery, JSON, Angular JS, Angular 2, Node JS, React JS. |
| **Tools & Framework** | Struts, Spring Core (IOC), Hibernate, JPA, Kafka, Spring MVC, Spring AOP, Spring Data (Spring JDBC, Spring JPA), Spring Boot, Spring Batch, Spring Security and Spring Cloud. |
| **Web services** | Microservices, SOA Architecture, SOAP, RESTful, JAX-RS JAX-WS, Apache AXIS II, Apache CXF, Jersey, Rest Easy. |
| **Middleware Technologies** | JMS, RabbitMQ, Kafka, Spring AMQP, Spring Integration, Apache Camel. |
| **Cloud Platforms**  | PCF (Pivotal Cloud Foundry), AWS (EC2, EBS, RDS, Lambda). |
| **Web/App Servers/Containers** | WebSphere, Apache, Tomcat, JBoss EAP, WebLogic and Docker. |
| **Databases** | IBM DB2, Oracle, PostgreSQL, Apache Cassandra, NoSQL MongoDB |
| **Development Tools** | Eclipse, Spring Tool Suite (STS), IntelliJ, IBM RAD. |
| **Testing Tools/ Frameworks** |  SoapUI, Rest Client, SonarQube, Jprofiler.JUnit, Mockito, Jasmine, Karma, Selenium, TestNG, Cucumber, Gherkin. |
| **Version Control Tools** | GitLab, GitHub, BitBucket, IBM Serena. |
| **Build-Automation Tools (CI)/Issue Tracking Tools** | Maven, Gradle, Apache ANT, Apache IVY, JenkinsJIRA, Rally, Jazz, Pivotal Tracker |
| **OS & Environment** | Windows, Linux, and Mac OS. |
| **Design Patterns** | MVC, Factory, Front Controller, Singleton, Façade, Business Delegate, Decorator, Observer and DAO patterns |

**WORK EXPERIENCE:**

**Capital One, TX May 2022 – May 2025**

**Software Engineer**

**Responsibilities:**

* Designed a Java 11 batch application to validate data movement between source and target systems and hosted it on AWS EC2.
* Designed and implemented efficient, scalable, and fault - tolerant Spring Boot APIs to allow access to the validation data and notify load latency to relevant stakeholders.
* Led the effort to modernize and optimize existing APIs, converting to AWS Lambda functions leading to an 83% improvement in performance by reducing response time from 2 minutes to 40 seconds.
* Created unit and functional tests using testing frameworks such as JUnit and Mockito to ensure a test coverage of more than 90% for all framework components. Remediate vulnerable code and updated dependencies to improve application security.
* Designed and implemented a containerized serverless architecture, packaging applications into lightweight, portable containers. Configured and deployed these containers on AWS ECS Fargate clusters, resulting in a highly scalable and efficient deployment environment leading to 50% reduced deployment time and improved resource utilization by 40%.
* Used a Java 11 batch application to validate data movement between source and target systems .
* Set up CI/CD pipelines using Jenkins and implemented scripts for automated deployments, performing functional and performance tests and deploying docker containers.
* Analyzed request and response formats of existing API endpoints, integrated them into internal API Gateway, and set up OAuth Authentication and rate limiting.
* Implemented adapters in RESTful Microservices to allow connection to various source databases. Designed and implemented a system to track the data transferred between the source and target databases.
* Implemented Data Quality checks and metadata tracking for the data transferred between the source and target system. Setup Splunk logging to track application logs.
* As part of production support, monitored job status and responded to incidents and customer JIRA tickets to ensure outstanding SLA.
* Optimized system throughput by replacing blocking REST calls with asynchronous handlers by integrating Vert.x microservices, increasing API throughput by up to 30%
* Implemented authentication service using internal tools to generate tokens and authenticate users using OAuth 2.0 protocol.
* Developed Spark application to consume more than 100 streams in real time using Kafka streaming and write more than 1.7 million records to snowflake tables every day.
* Led the effort to modernize UI components using the latest version of Angular. Implemented SSO authentication using the Backend for Front End pattern.

**Citibank, Feb 2021 – Apr 2022**

**Software Engineer**

**Responsibilities:**

* Performed manual Black box and White box testing of iOS, Android, and web applications.
* Writing queries in SQL to generate randomized test data and tokenize sensitive data.
* Worked as part of the Citi Card team, responsible for analyzing Citi architecture of various Card applications and writing test scripts.
* Developed automation scripts in Gherkin using the cucumber framework to perform automated testing in BDD format and TDD format.
* Created complex SQL queries for data manipulation and retrieval, optimizing performance for high-traffic operations in the database.
* Designed and implemented RESTful APIs using Spring Boot to enable communication between the front end and the back end.
* Utilized AWS services such as EC2 and S3 for deploying and managing cloud-based applications, ensuring high availability and scalability.
* Implemented Kafka topics with appropriate partitioning and replication to ensure data availability and fault tolerance.
* Developed database connectivity using JDBC for handling complex transactions and ensuring secure data transfer.
* Managed project development in IntelliJ IDE, using its advanced tools for coding, debugging, and testing Java applications.
* Automated server setup, deployment, and monitoring processes on AWS using shell scripts in a Linux environment.
* Implemented data validation and business logic in Spring MVC, ensuring the integrity and accuracy of user inputs across the application.

**Pecos Solutions LLC Jan 2020 – Feb 2021**

**Software Engineer**

**Responsibilities:**

* Implemented AWS Lambda Functions to run batch operations on 50000 documents stored in S3.
* Created DynamoDB to store and access user credit. Integrated web application with Stripe payment API to handle payouts and credit transfers. Integrated DynamoDB to store NoSQL data, allowing faster access to data.
* Created Flask API to access user data and metadata. Hosted the APIs on Docker containers. Set up container orchestration using Kubernetes and created test scripts to test APIs.
* Replaced Java Messaging Service (JMS) calls with AWS SQS, utilizing AWS SDK to enable bulk email processing effectively.
* Developed asynchronous, event-driven microservices using Vert.x, enabling high-performance, non-blocking I/O operations and reducing latency under high concurrency enabling client-server comunication.
* Utilized relational databases like MySQL, PostgreSQL, and Oracle to create optimized queries for performance enhancements.
* Used asynchronous, event-driven microservices using Vert.x, enabling high-performance,
* Designed and developed user interfaces using JSP, Java Beans, CSS, HTML, DHTML, jQuery, JavaScript, and JSON for dynamic web applications.
* Authored JavaScript functions for validations and Java Beans for data objects; implemented session beans, entity beans, and message-driven beans for robust application architecture.
* Worked extensively with Hibernate for object persistence and retrieval operations.
* Developed database objects, including procedures, packages, and triggers, using PL/SQL and SQL scripts, and executed DDL/DML operations for schema management.

**Charles Schwab, Austin, TX Aug 2018 – Aug 2019**

**Role: Software Developer**

**Responsibilities**:

* Involved in every phase of software development life cycle with object-oriented approach for continuously satisfying client requirements.
* Developed the application from scratch using Eclipse IDE and MVC model.
* Implemented server-side programs by using Servlets and JSP.
* Developed the UI using Java Servlets, Java script, HTML, CSS3, Ajax.
* Developed the Action classes for handling the requests from the JSP pages.
* Apache Tomcat Serve is used for deploying the projects.
* Helped in designing and creating the database structure and its tables to minimize the storage of data.
* Developed Java Bean components to communicate with Data Base.
* Developed the Ant scripts for preparing WAR files, EAR, EJB used to deploy J2EE components.
* Created tables, Views, Types, triggers, complex join queries, stored procedures, and functions and modification to exciting database structure as required for addition of new features.
* Developed various GUI interfaces using Java AWT and Swings.
* Involved in Designing the Database Schema and writing the complex SQL queries.
* Involved in Code reviews for other modules developed by peers.
* Designing and establishing the process and mapping the functional requirement to the work flow process.
* Accessed stored procedures and functions using JDBC Callable statements.
* Used PL/SQL to code packages, store procedures, functions, and loaders.
* Created Unit, Acceptance and Integration Test Documents and Code Review Documents.

**EDUCATION**

* Master of Science in Computer Science, **The University of Texas at Arlington**
* Bachelor of Technology in Computer Science, **Alliance University, Bengaluru India**