**Sridatta Raghavendra Chintapalli**

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**Professional Summary**

* Seasoned software developer with 8 years of expertise in backend application development, specializing in Java/J2EE technologies. Possesses a comprehensive understanding of building scalable, high-performance, and secure applications. Additionally, has 1 year of experience in the design and development of full-stack web application development utilizing NodeJS and the React framework, with a keen focus on ensuring scalability, optimal performance, and robust security.
* Experienced in high-level system design, low-level system design using UML, and database design using ER diagrams for highly scalable and performance-oriented applications and services.
* Worked with product architects and managers in developing POCs, which helped in selecting the right technology stack for the implementation of the product.
* Involved in the Software Development Life Cycle process with an emphasis on effective change management and strategies that help reduce application downtime.
* Experienced in developing REST APIs using Spring Boot and NodeJS express frameworks.
* In-depth understanding of Object-Oriented Analysis and Design practices and experience in implementing software development best practices that translate to maintainable code base.
* Experienced in implementing Gang of Four Design patterns that promote code reusability, maintainability, Scalability, and performance optimizations.
* In-depth knowledge of core Java features such as JDBC, RMI, Collections, Multithreading, Exception Handling mechanisms, Transaction Management, Concurrency, Collections, Data structures, Lambda Expressions, and Functional Interfaces.
* Solid understanding of Asynchronous programming, event loops, streams and buffers, error handling, and ExpressJs framework.
* In-depth understanding of concepts encapsulated in Spring Boot architecture (Spring MVC, Spring Context, Spring IOC, Spring AOP, JDBC, IO, JTA, Spring DAO, Spring ORM, Spring Data, Spring Boot, Spring Batch, Spring Security, and RESTful) and ORM (Hibernate).
* Experienced in configuring traceability and logging for spring boot applications using Open telemetry, Jaeger, and Log4j.
* Experienced in developing one-time jobs that help in data correction and schema changes with minimal impact on applications running in production.
* Experienced in working with feature flag-based application development.
* Worked with various version control systems like Git and AWS Code Commit.
* Designed and developed web applications using HTML, CSS, Javascript, and React.
* Experienced in writing unit tests in Junit and frameworks like Mockito and PowerMock for Java-based applications and Jest for NodeJs and React-based applications.
* Worked towards automating integration tests with Postman.
* Worked with SQL and NoSQL databases and used spring ORM, and hibernate frameworks in combination with custom integrations using Java database drivers.
* Proficient in deploying WAR files through Jenkins and Maven, utilizing deployment tools for Glassfish, Apache Tomcat, and WebLogic. Experienced in continuous integration with Jenkins and continuous deployment with Spinnaker.
* Working knowledge in configuring various AWS services like API Gateway, Lambda, Chime, Pinpoint, ALB, NAT, IGW, SNS, and SQS.
* Proficient in containerizing applications and deploying them in a Kubernetes environment managed by ISTIO.
* Proficient in IntelliJ and Eclipse IDE’s, and application servers like Apache Tomcat, and nginx.

**Professional Experience**

**Jun 2023 – Aug 2023**

* Designed and deployed virtual corporate-like infrastructure in AWS for SecureIQLab’s cybersecurity tool testing methodology.
* Used AWS VPC, Subnets, and routing tables to segment the virtual networks.
* Strengthened the security of subnets by utilizing network-level access control.
* Deployed virtual machines on EC2 instances and configured them to be part of an active directory-controlled network.
* Configured AWS Internet gateway, and NAT for Ingress and Egress connections to machines in the network.
* Configured AWS Network firewall and AWS Security groups to disable vulnerable ports and applications.
* Developed penetration testing scenarios for an active directory-controlled environment using cobalt strike.
* Automated infrastructure life cycle using Terraform and reduced the test environment clean-up time by 80%.

**Web Developer Jan 2023 – Present**

* Conceptualized patient care product architecture with directed POCs and inputs from the lead developer.
* Developed a high-level design document that encapsulates the architecture of the patient care tracking system.
* Ideated database design for the application which emphasizes on increase query performance and cost.
* Developed a low-level design document with UML diagrams that capture the object-oriented design principles.
* Configured AWS Code commit, and AWS amplify to facilitate continuous integration and deployments.
* Configured React framework and NodeJS to use typescript with Babel as a transpiler and Jest as the unit testing framework.
* Deployed AWS infrastructure that includes Lambda Services, SNS topics, SQS queues, Cognito user pools, and DynamoDB tables using AWS Cloud formation stack powered by Amplify continuous deployment pipeline.
* Developed reusable UI components in React following the common application theme using Chakra UI.
* Integrated UI application with SSO login using the AWS Cognito API’s.
* Effectively utilized React frameworks useEffect, and useState to manage the lifecycle of functional components.
* Incorporated redux into the application for better state management and caching in the patient care tracking dashboard.
* Developed a microservice that runs on AWS lambda for tenant onboarding, the service automatically sets up cognito user groups, SSO configurations, and service account tokens for mutual trust between microservices.
* Developed a total of 10 core services that run on AWS lambda that provide various functional aspects required for patient care tracking.
* Implemented a high-performance microservice that triggers automated SMS texts to users during their preferred timings.
* Implemented data aggregation service that used DynamoDB streams to facilitate aggregation queries on DynamoDB.
* Added phone call option from the UI application to the patient’s phone using AWS Chime and web sockets.
* Designed and implemented a real-time chat window that allows the ER nurses to effectively communicate with patients using AWS Pinpoint and web sockets.
* Implemented ACL restrictions for database objects by using custom attributes in AWS Cognito.
* Secured the REST API endpoints with stateless JWT tokens.
* Integrated lambda services functionalities with REST APIs using the AWS API Gateway and serverless Express framework in the lambda functions.
* Effectively utilized asynchronous programming to offload noncritical workloads to run in the background by leveraging SNS topics and SQS queues.
* Developed CRON jobs to distribute noncritical workloads to multiple lambda services to handle high load on applications.
* Developed unit test cases using Jest as part of the TDD process.

**Software Developer Mar 2015 – Jul 2022**

* Initiated design and development of microservices to schedule visits and activities in the SAP CX team to improve sales planning and last-mile distribution using VRP and constructive recommendations.
* Evaluated various technology stack implementations to finalize product architecture that delivers maximum value for the customers.
* Developed 6 critical microservice applications that provide visit planning and recommendations functionalities using Java, Spring boot, Web services, JDBC, PostgreSQL, and MongoDB.
* Implemented a high-performance microservice to map millions of physical addresses to geo coordinates using Spring boot, Kafka, and MongoDB.
* Developed Plain Old Java Objects (POJOs) and Data Access Objects (DAOs) to represent and interact with database entities, employing Spring JDBC annotation mappings.
* Implemented microservices using the Spring framework, leveraging Spring Dependency Injection through Spring Core annotations. Additionally, utilized Spring MVC for developing RESTful APIs and Spring Boot for building and testing microservices.
* Leveraged Java 8 features extensively in code development, incorporating Lambda expressions for concise and expressive syntax. Implemented resource classes and employed Java 8's Executor framework for efficient parallel processing. Additionally, utilized Java 8 capabilities for fetching documents from the database.
* Implemented custom object mappers in Spring boot to convert POJO’s to JSON, this improved the performance of the API by 30%.
* Created Bean classes and configured them in the Spring configuration file to facilitate Dependency Injection. Developed Controller Classes by integrating Spring MVC, Spring AOP, Spring Boot, and Spring Batch modules.
* Employed Spring JDBC and Spring Hibernate Object Relational Mapping (ORM) for backend data persistence. Managed Data Access with DAO design, establishing JDBC connectivity to the database.
* Designed and developed a custom repository layer in Spring boot application using the Java MongoDB database drivers to increase the performance of database operations.
* Integrated visit planning service with visit recommendations and HERE maps route optimization APIs to generate profit-maximizing routes for sales representatives.
* Contributed to the building and deployment of code in the Development Environment as an integral part of Continuous Integration through Jenkins.
* Utilized the JUnit Regression Test Framework for effective unit testing, enhancing programming efficiency, and elevating code quality.
* Created Kubernetes jobs to perform data correction and migration and reduced the downtime of applications by 70%.
* Engineered application-level core APIs as RESTful web services and created corresponding test cases using Spring Mockito to ensure the robustness and reliability of the developed web services.
* Conducted end-to-end testing and maintained test automates using shell scripting and Postman, reduced manual testing effort by 30% and increased the pace of identifying regressions in the code.
* Performed static code analysis using Sonar and Fortify and implement secure coding practices to prevent application security issues.
* Spearheaded knowledge-sharing sessions in the team and created a repository of documents and recordings for further reference in the team.
* Mapped JIRA stories to Junit test cases and Postman test cases, this improved tracking of regressions and reduced the time taken to identify breaking changes in the code by 60%.
* Performed manual testing in the development environment and handled testing activities in the team with the help of test automation using Postman.
* Designed and delivered use case diagrams, UML diagrams, ER diagrams, sequence diagrams, activity diagrams, and state chart diagrams to product owners and managers.
* Handled release of visit planning microservices and audited product standard KPIs during every release and deployed applications to multiple AWS regions using Spinnaker.
* Extensively used GIT to manage the development of new features using feature branches.
* Implemented feature flag-based development in Spring boot to incrementally release critical features to customers.
* Initiated and developed a POC application that generates bite-sized micro-learning content from SAP LMS courses using Python, NLP, and SAP Cloud Platform to make learning easy and fun for users.
* Integrated IBM Watson into the SAP LMS application to generate timing annotations for long content videos.
* LMS Admin UI is being migrated from Adobe Flex to UI5, to validate the correctness of the UI existing fields on the UI need to be extracted. The extracted info will be used as a reference to check the correctness of the UI implemented in UI5.
* Used core Java to parse the files and generate a JSON structure that can be easily interpreted by any framework.
* LMS User To-do API returns the current user's to-do courses list. Some of the parameters that are required by the UI are not being populated by the UI. This API enhancement is done to fix this issue.
* Developed multi-file copy in the SAP DMS application that supports nested folder structures.
* Implemented changes in the SAP PLM UI application to support multi-file copy using the SAP UI5 framework.
* Developed documentation for the APIs and delivered them to customers.

**Skills**

* **Core Competencies:** Software design and development, Data Correction, and migration, REST API Development, Data structures and Algorithms, Database Design, Object Oriented Programming, Operating Systems.
* **Languages & Frameworks:** Java 8.0, Javascript, Typescript, Spring Boot, ExpressJs.
* **Tools & SDK’s:** GIT, Jenkins, JIRA, Spinnaker, Postman, Fortify, Sonar, AWS SDK, Kibana, Grafana, Jaeger, Prometheus, Cloud watch, BurpSuite, Nmap, Wireshark, GDB, Ghidra.
* **Cloud:** Microservices, AWS EC2, Lambda, SQS, SNS, Docker, Elastic Search, Kafka, VPC, IGW, NAT.
* **Databases:** MongoDB, PostgreSQL 12.0, DynamoDB.
* **Web Technologies:** HTML5, CSS, Javascript, React and redux, Angular 4/6/8, NodeJS, JSON, XML.
* **Build & Configuration Tools:** Gradle 3.4.1, Maven 3.3.9, Babel 7.
* **J2EE Technologies & Frameworks:** JDBC, REST, XML, Spring3.x/4.x/5.x, Hibernate, Spring MVC, Spring Boot, Spring IOC, Spring Batch, Spring Security, Spring ORM, EJB, Microservices, JPA, JSP, JNDI.
* **Operating systems:** Windows, Linux, Mac.
* **IDE’s:** IntelliJ IDEA, Eclipse, Spring Tool Suite, and Visual Studio Code.
* **Testing tools:** JUNIT, Mockito, PIT Mutation testing.
* **Application / Web servers:** Apache Tomcat 8, nginx 1.24.0, IBM WebSphere 8.x/9.x, Web logic 12c.
* **Web Services:** SOAP 1.2, REST 2.0, JAX-WS, JAX-RPC, JAX-RS

**Education**

* **Master of Engineering in MTDE, Cybersecurity,** Texas A&M University, College Station, TX, June 2024.
* **MTech in Software Engineering,** Work Integrated Learning Program, BITS Pilani, Bangalore, 2019.
* **BE in Electronics and Communication Engineering,** Saveetha School of Engineering, Chennai, 2017.

**Academic Projects**

**Cryptographic algorithm simulator**| Nodejs, animeJs, Reactflow.

* Designed and implemented a simulation tool for showcase internal working of cryptography algorithms.

**User Interface integration testing framework to identify malicious payloads**| Nodejs, Python, React.

* Ideating a UI testing framework that can leverage existing libraries to perform malicious input validation in the development phase of the project to reduce time during penetration testing.

**Certification Validation Using Open Badges and Blockchain** | Java, SAP Cloud Platform.

* Developed an application to generate sharable and authentic certifications on blockchain that integrates with SAP LMS course management system.

**Courses and Certifications**

* CompTIA Network+ Certified, Jan 2023.
* GIAC Foundational Cybersecurity Technologies (GFACT), September 2023.