**vijkumr@gmail.com** **Vijaykumar Ranganathan +14409906413**

https://linkedin.com/in/vijaykumar-ranganathan-94962729/

**Professional Summary**

* Overall 12+ years of experience in analysis, design, development, testing and deployment of Web and Enterprise Applications using Java/J2EE technologies.
* Experienced in Iterative/Waterfall/Agile (Scrum, TDD) development methodologies.
* Proficient in Java development with expertise in Core Java, Spring Framework (including Spring Boot,Spring Data, Spring Batch, Struts, and Spring Security), Hibernate, and JPA, JSF Primefaces Shell Scripting, Single Page Applications, SOA- Web Services and RESTFUL Services.
* Skilled in frontend development technologies such as HTML, CSS, JavaScript, TypeScript, Angular, React for responsive web design.
* Extensive experience in developing web pages quickly and effectively using JavaScript, AngularJS, Angular2, Angular12,HTML5, CCS3,JQuery and in making webpages cross browser compatible
* Expertise with Extreme Programming (XP) practices including Pair programming.
* Experienced in working with various databases including relational databases like MySQL, PostgreSQL, Oracle, SQL Server, and NoSQL databases like MongoDB.
* Proficient in build tools like Maven and Gradle for managing project dependencies and generating artifacts.
* Experienced in frontend testing frameworks like Jasmine and karma along with backend testing using JUnit and Mockito for unit testing and mocking dependencies.
* Skilled in designing and developing APIs, including RESTful and SOAP APIs, for seamless communication between client and server applications.
* Collaborated with cross-functional teams to review and refine Swagger specifications, ensuring alignment with business requirements and industry best practices.
* Familiar with various design patterns such as MVC, Singleton, Factory, Observer, and Strategy for designing scalable and maintainable software solutions.
* Experienced in middleware and messaging technologies such as Apache Kafka, JMS, for efficient communication and integration between distributed systems.
* Experienced in implementing Authentication and Authorization using OAuth2 JSON Web Token (JWT) for secure access control and user authentication.
* Proficient in utilizing AWS services such as EC2, S3, RDS, Lambda, DynamoDB, and ECS for cloud infrastructure and application deployment.
* Familiar with Azure services including Azure Virtual Machines, Azure Blob Storage, Azure SQL Database, Azure Functions, and Azure Kubernetes Service (AKS) for cloud-based solutions.
* Proficient in utilizing ticketing tools such as Jira, Service now to facilitate efficient task management, collaboration, and issue tracking throughout the software development lifecycle.

* Proficient in containerization and orchestration using Docker, Kubernetes, and OpenShift Container for deploying and managing containerized applications in cloud-native environments.
* Skilled in version control using SVN, Git, and Bitbucket, along with Devops CI/CD implementation using Jenkins and Bamboo for automated build and deployment processes.

**Education**

**Bachelor’s in Mechanical Engineering, Visvesvaraya Technological University 1999-2005.**

# SKILLS:

|  |  |
| --- | --- |
| **Languages** | Java, Java Scrip |
| **Java/J2EE Technologies** | Servlets, JSP, JSTL, JDBC, JSF, JavaBeans, MVC, ANT, MAVEN, Log4j, XML, JAXP, DOM, JUNIT, Web services, Multithreading, JTA, Java 8. |
| **Web Technologies** | HTML, JavaScript (ES5, ES6), jQuery, Node.js, React.js, CSS, AJAX, XML, Web Services (SOAP, REST, WSDL), Angular 6 Typescript. |
| **Frameworks and IDE’s** | Struts, Spring version 3, Hibernate, JPA, JSF 2.0/1.2, Spring Core, Spring ORM, Spring MVC, Spring AOP, Spring Boot, Spring Integration. |
| **Database Environments** | Oracle 10g, SQL Server, NoSQL, MySQL, PL/SQL, MongoDB. |
| **Cloud Technologies** | AWS (EC2, S3, VPC, IAM, Route 53), AZURE, Docker, Jenkins, Kubernetes |
| **Web/Application Servers** | Web Logic, IBM Web Sphere, Apache Tomcat. JBoss. |
| **Automation Testing** | Selenium, Cucumber. |
| **Version Control Tools** | SVN, GIT, Bitbucket |
| **Tools** | Eclipse, Visual Studio code, NetBeans, IntelliJ, Jira |
| **Operating Systems** | Windows, MacOS, Linux, UNIX |
| **Stream Processing/****Others** | Apache Kafka and JMS Listeners |

**Work Experience:**

*State of New York/Sr Java BackEnd Developer/Houston, TX July 2022 – Till Date*

The data Bridging and Synchronization process is responsible for bridging data from the Legacy System to IES and from IES back to Legacy System. The synchronization follows the Message Queue or Batch mechanism for inbound and outbound data exchanges. This is a NextGen framework where we generate CCDs (cargo, collections, Dao).

**Responsibilities:**

* Implemented and maintained stringent security measures in compliance with industry standards, leveraging technologies like Spring Security, OAuth
* Reduced post-release issues by 25% through thorough testing with JUnit and Mockito.
* Experienced in performance optimization techniques for GraphQL APIs, including query batching, caching, and pagination, to improve overall system efficiency.
* Proficient in integrating with various external APIs to ingest, process, and analyse data from diverse sources, including RESTful APIs, databases, cloud services, and streaming platforms.
* Integrated Apache Kafka as a distributed messaging system into Java-based applications, enabling asynchronous communication between frontend and backend components.
* Developed user interface of the application using Angular 12.
* Installed Pivotal Cloud Foundry(PCF) on instances to manage the containers created by PCF.
* Used Docker to virtualize deployment containers and push the code to instances cloud using PCF.
* Used Jenkins as Continuous Integration tools to deploy the Spring Boot microservices to PCF using build pack.
* Wrote GraphQL queries to fetch data from APIs.
* Demonstrated experience working with (consuming) REST or GraphQL APIs via client-side JavaScript.
* Developed and consumed RESTful Web Services and secured RESTful API using application layer security framework Spring Securitu, OAuth2 and JWT for securing REST endpoints.
* Implemented publish-subscribe patterns with Kafka topics to decouple frontend and backend services, enabling seamless communication and horizontal scaling of microservices.
* JIRA Issue tracker is used for tracking various software change requests, performance testing &amp; defects fixing, issues and fixes applied daily to streamline the application development.
* Implemented effective branching strategies such as feature branching in Bitbucket to facilitate parallel development, code isolation, and seamless integration of new features into the main codebase.
* Utilized EC2 Auto Scaling to dynamically adjust the number of EC2 instances based on traffic patterns, ensuring optimal performance and cost-efficiency.
* Configured S3 buckets and implemented lifecycle policies to automatically transition Java application logs and backups to lower-cost storage tiers like S3 Glacier.
* Developed serverless Java functions using AWS Lambda to execute business logic in response to events triggered by Amazon S3, Amazon DynamoDB, or Amazon SNS.
* Integrated Lambda with Amazon API Gateway to build serverless RESTful APIs, reducing infrastructure management overhead and scaling costs based on usage.
* Implemented custom CloudWatch Metrics and Logs agents to monitor application-specific metrics and log files, providing insights into application performance and behaviour.
* Configured Docker container networks to facilitate communication between Java microservices running in separate containers, ensuring seamless integration and scalability.
* Crafted optimized Docker files for Java applications, leveraging multi-stage builds to minimize image size and improve build performance.
* Integrated Bitbucket with CI/CD pipelines using tools like Jenkins or Bamboo to automate build, test, and deployment processes, ensuring rapid and reliable software delivery.
* Configured Azure Cloud Services, Azure Storage, Azure active directory. Created and manged azure AD tenants and configured application integration with Azure AD.
* Configured VMs avaialblitiy sets using Azure portal to provide resiliency and scale sets using Azure Resource Manager to merge network traffic.
* Automated deployment workflows in Bitbucket Pipelines to trigger deployments to Kubernetes clusters upon successful completion of CI pipelines, ensuring seamless and reliable application updates.

**Environment**: JavaScript, Angular, Node.js, Express.js, Java, J2EE,JDBC, Hibernate, Spring boot, Spring MVC, YAML, MongoDB, Tomcat, Kafka, Bit Bucket, AWS, Docker, Kubernetes, Jenkins, Agile, Angular 12, Azure and PCF.

*Cotiviti/Sr Java BackEnd Developer/Dallas, TX Jan 2022 – June 2022*

LTC (Long Term Care Audit System) is the application used by the Sr. Auditors and the above will be responsible for uploading all data files needed to properly process audits for each project within the LTC Audit Program.

These files include claim files, patient liability files, rate files, and other recipient eligibility files.

**Responsibilities:**

* Developed various Java/J2EE components using Microservices, and Spring Boot.
* Developed user interface of the application using Angular 12.
* Experience with revising, updating, refactoring, and debugging code.
* Leveraged MongoDB's native APIs and query language to perform CRUD (Create, Read, Update, Delete) operations on data.
* Used Splunk to monitor logs for debugging and created alerts to notify the support through email.
* Experience in TDD (Test Driven Development) using Mockito by writing the Junit Test cases.
* Worked on React JS rendering using components that contain additional components called custom HTML tags.
* Implemented Kafka streaming applications to process high-volume data streams in real-time, ensuring low latency and high throughput.
* Developed Kafka consumers and producers to ingest, transform, and route data streams from various sources to downstream systems.
* Captured and logged exceptions using Log4j for effective error tracking. Included relevant details about exceptions, such as stack traces and error codes.
* Configured Kafka exchanges and queues to implement message routing and filtering based on message attributes or routing keys, enabling efficient message distribution, and processing.
* Set up and configured AWS Elastic Load Balancer to distribute incoming traffic across EC2 instances in an Auto Scaling Group. Ensure high availability and fault tolerance by distributing workloads across multiple instances.
* Monitored Amazon EC2 instances for performance metrics and resource utilization using Amazon CloudWatch. Implement optimizations such as instance resizing and scaling to meet performance requirements and manage costs efficiently.

**Environment:** Java 1.8, Spring Boot 2.1.3, Microservices, IntelliJ and BitBucket, Hibernate, SQL Server, and Mongo DB, AWS,Docker and Kubernetes, PCF, Kafka,Azure, RabbitMQ, Node.js, Angular 12

*Cardinal Health/Full Stack Developer/Houston, TX Apr 2021 – Dec 2021*

Care-tracker (CT) is a solution that assists medical oncologists with matching the patient to the appropriate treatment based on adherence to NCCN guidelines and value. Once a treatment is selected, CT identifies when the episode of care starts for the patient and can provide financial estimates and total costs. As care is delivered, within the practice and outside of the practice, care navigators can use CT to monitor adherence to guidelines and track cost reconciled against original estimate.

**Responsibilities:**

* Leveraged Spring Boot and Java EE technologies, resulting in a 30% improvement in system performance as measured by response times for critical transactions.
* Achieved horizontal scaling, allowing the system to handle a 50% increase in concurrent users without degradation in performance.
* Integrated CI/CD pipelines using Jenkins and GitLab, automating the testing and deployment processes and achieving a 60% reduction in manual intervention.
* Developed an application using Java, Hibernate, JDBC, Spring MVC, Spring IOC, Spring Annotations, Spring AOP, Spring Batch, JSP, Web Services, HTML, CSS, and JavaScript.
* Designed and implemented the multi-tier applications using web-based technologies like Spring MVC and Spring Boot.
* Used Microsoft Azure platform for the building, managing applications, and deploying web applications.
* Involved in the development of test environment on Docker containers and configuring the Docker containers using Kubernetes.
* Performed Data-Driven Automation Testing using SQL, JDBC connection
* Experienced in developing React components.
* Implemented Spring ORM with Hibernate by taking advantage of Java features like annotation metadata, auto wiring, and implement the DAO layer with Hibernate Entity Manager’s Session Factory, HQL, and SQL.
* Developed unit and integration tests for existing Microservices using JUnit, Mockito.
* Developed the various feature of the application using front end technologies like React Js.
* Developed, Deployed Enterprise Web Services (SOAP and REST), and Consumed and generated client using Jersey and Axis Frameworks using IntelliJ.
* Set up and configured AWS Elastic Load Balancer to distribute incoming traffic across EC2 instances in an Auto Scaling Group. Ensure high availability and fault tolerance by distributing workloads across multiple instances.
* Configured Azure SQL Database for secure and compliant storage of sensitive healthcare data, ensuring data confidentiality and regulatory compliance with HIPAA regulations.
* Utilized Azure Functions to automate backend processes such as healthcare data processing and analytics, optimizing resource utilization and reducing operational costs for healthcare operations.
* Managed deployment of Java apps on Azure Virtual Machines with auto-scaling and load balancing for efficient workload management.

**Environment:** Java, Spring, AWS, Spring MVC, Hibernate, JDBC, Java Script, DOM, React, Node.js, Kafka, SOAP, Rest Webservices, GitLab, Junit, Mockito, Azure.

***JP Morgan Chase / Full Stack Developer/ Houston, TX Nov 2018- Mar 2021***

Legal Data Central is a web-portal which is used by the attorney of the law firms. It creates a vendor and maintains the data of the vendors.

**Responsibilities:**

* Worked on both the front-end and back-end to create seamless end-to-end functionality.
* Involved in developing UI using Spring MVC framework, JSP, JSTL, HTML5, CSS, JavaScript, Typescript and AngularJS.
* Used Angular-CLI to generate components, services, directives, filters, Angular Reactive forms to implement complex forms and performed the validations using Form Builder.
* Designed, developed, and maintained server-side logic using Node.js.Implemented RESTful APIs for communication between the server and client applications.
* Developed and maintained test suites for AngularJS or Angular applications using Jasmine and Karma, validating component behaviour and interactions.
* Integrated Jasmine with Karma test runner to automate test execution in various browsers and environments, ensuring consistent behaviour across platforms.
* Developed custom server APIs to provide backend functionality for Angular components, facilitating communication between client-side and server-side logic.
* Adhered to RESTful API design principles to ensure a standardized and predictable API structure. Implemented versioning and maintained backward compatibility for APIs.
* Integrated Node.js with databases (e.g., MongoDB, PL/SQL) for efficient data storage and retrieval. Executed database queries and optimized data access operations.
* Used PL/SQL for managing relational databases, writing stored procedures, and optimizing SQL queries.
* Worked on Azure Load Balancer for deploying applications in high availability, distributing traffic across multiple instances.

**Environment:** Java, Spring MVC, Java Script, Angular, Node.js, Jasmine,PL/SQL, MongoDB, GIT, Maven, Jira, Unix/Linux, SonarQube, Azure, PCF.

**BCBS | Sr Java BackEnd Developer | *Jacksonville, FL Dec 17 – Nov 20***

Novitasphere is a web-portal which maintains the patients Claims Requests and Claims Summary across various hospitals and with the various providers. It also maintains Overpayment record for the patients across various jurisdiction.

**Responsibilities:**

* Wrote clean, efficient Java code, adhering to best practices, enhancing codebase quality, and system reliability.
* Proactively resolved system issues and performance bottlenecks, ensuring a seamless user experience.
* Design and development of UI Screens using HTML, CSS, JavaScript, and AJAX.
* Sanity testing of web services using SOAP UI tool to validate request and response xml’s for REST and SOAP web services.
* Implemented Dependency Injection (DI) feature of Spring framework to inject beans and configured the controller.
* Extensively used Hibernate using Spring JPA framework to map java classes into database tables to access and update information in the database.
* Implemented REST and SOAP web-based service using JAX-WS, JAXB and JAX-RS API’s to expose and consume with defined WSDL, URL’s.
* Implemented Spring Boot Micro Services to divide the application into various sub modules. Used micro-services architecture with Spring based services to integrate user libraries in the application.
* Extensively worked with the retrieval and manipulation of data from the Oracle Database by writing queries using SQL and PL/SQL.
* Created SQL and PL/SQL queries, stored procedures, and triggers to manipulate data, control access to data and to maintain data integrity.

**Environment:** Java, HTML5, CSS3, JavaScript, Spring, RESTful Services, SOAP, Microservices, Oracle.

**Board of Elections / Java BackEnd Developer/ Rockville, MD Mar 17 –Dec 17**

The Board of Elections project helps the students gain points academically when they actually

help during the elections time at the county. This project has 3 modules name PP, FV, EJ.

**Responsibilities:**

* Involved in designing, developing, customizing of application using Java8, Spring Framework, and Maven.
* Developed the application based on Model View Controller (MVC) architecture Using Spring Framework.
* Designed and developed the JSP pages with HTML, CSS, JavaScript, and XML and accomplished the front-end validations.
* Involved in developing DAOs to connect to backend Database to implement the business logic.
* Performed CRUD operations like Update, Insert, and Delete the data in MySQL.
* Installed, configured, upgraded, and maintained Apache Tomcat Server on various platforms.
* Implemented Microservices using Spring Boot and REST APIs, enhancing system scalability.
* Tested the application thoroughly in Unit Testing phase using JUnit.

**Environment:** Core Java, Spring, Hibernate, Eclipse, HTML, CSS, JavaScript, AJAX, Tomcat, REST, Junit, Git

.

*AO of US Courts / Java BackEnd Developer /Washington, DC Feb 15 - Dec 16*

A PACT is a case management system used by probation and pretrial services offices.

It is used to manage the investigation and supervision of offenders and defendants.

Used by 94 district courts, 9000+ probation officers.

Components:

Probation and Pre-Trial Services Automated Case Tracking System (PACTS)

/Pre- Sentence Investigation (PSX).

PACTS components include:

Client data, Case Dockets, Charges and Convictions of Offense, Case Plans and Chronos.

PSX components include:

Pretrial interview, Bail Report, Presentence investigation, Presentece Report, Guidelines Manual.

ESB Web Services:

Rest, SOAP, Template Services.

Provides access to the PACTS database from non-PACTS application.

**Responsibilities:**

* Developed the functional requirements based on the business requirements provided.
* Developed various J2EE components like Servlets, JSP, JSTL, AJAX, SAX, XSLT, JAXP, JNDI.
* Involved in Enhancement and bug fixing.
* Communicating project status and deliverables with project managers and project team.
* Performing other tasks as needed for successful project completion.

 Continuous integration using Jenkins on Jboss server – monitoring and troubleshooting.

* Worked on Sub Version for code integration and version control.

**Environment**: Java1.7, JDK 1.5, J2EE, JSF Primefaces, Junit, JavaScript, Restful Web Services.

**PNC Financial Services / Java BackEnd Developer/Brecksville, OH Jul 13- Dec 14**

It maintains all the financial transaction of the bank. It synchronizes and customizes the customer profile over the network which can be accessible and editable. It maintains the basic information of the real world such as savings bank account, current account, and fixed deposits and so on. This project integrates with different applications to maintain the customer transactions.

**Responsibilities:**

* Followed Agile – Scrum methodology for development of the product.
* Implemented the application with XP methodology as Agile process, refactoring the existing code and writing new code.
* Developed the web pages Java, JavaScript, and JQuery, Angular.jstechnology framework using Spring (MVC, JDBC), Hibernate, and Web Services with J2EE design patterns using Eclipse.
* Developed the web pages Java, JavaScript, HTML5, CSS and J2EE technology framework using Spring 2 (MVC, JDBC), Hibernate3.0, and Web Services with J2EE design patterns using Eclipse.
* Worked on Hibernate object/relational mapping according to database schema. Involved in creation of Test Cases for JUnit Testing.
* Wrote SQL, PL/SQL queries and Packages for updating data into the Oracle using SQL Developer tool.
* Used Stateless Session Beans(EJB) in session façade and for implementing business logic.
* Used Message Driven Beans (MDB EJB’s) for sending Payment messages to backend servers to process payment.
* Participating in and performing Code Reviews and/or Pair programming of peer development.
* Worked on Git Repository for code integration and version control.
* Wrote programs using TDD, utilizing frameworks, such as JUnit, and generating file based and database based mock data, to create cases that best covers possibly all business scenario.
* Developed various J2EE components like Servlets, JSP, JSTL, AJAX, SAX, XSLT, JAXP, JNDI, LDAP, JMS, MQ Series by RAD.
* Followed TDD pattern to minimize maintenance of new software development.
* Worked in Restful webservices.

Environment: J2EE, Eclipse 3.x, JDK 6, Spring3.2, Hibernate 3.0,JMS, JSP1.2, JavaScript, JQuery, Tomcat 6.0, CSS, AJAX, XML, XSLT, JUNIT, WSDL,log4j,SOAP(JAX-WS),Restful(JAX-RS), TOAD,PL/SQL,JUnit.

***Citi Group / Java BackEnd Developer/ Chennai, India Dec 10 - May 13***

OMI is leading software vendor, offering a range of financial and procurement solutions to retail industry. Prominent among the services offered by OMI are BICEPS, PROMPT and TRICEPS solutions. BICEPS Project includes expanding eProcurement, which is supply chain management. PROMPT is invoice Reconciliation management. TRICEPS is Warehouse management system. This project was replatforming from mainframe legacy systems to the java/j2ee platform.

**Responsibilities:**

* Involved in the complete Software Development Life Cycle (SDLC)
* Involved in requirement analysis and finding requirement gaps.
* Worked on MVC Pattern (Struts 1.0) to build the web tier
* Worked on middle tier and data access layers using various relevant design patterns like session façade, DAO etc.

Environment: Java, J2ee (Jsp-JSTL, Servlet),IBM WebSphere, Struts1.1, Oracle PL/SQL, TOAD, JUnit, : Java2SE, J2ee1.4, Spring.2.0 (MVC, IOC), JSP1.1, Servlets, JNDI, JDBC, Java Beans, Java Script, CSS, XML1.0, Oracle 9i.

*Boeing/ Java BackEnd Developer / Chennai, India Jan 09 - Nov10*

The Boeing Company is the largest aerospace company in the world, with its heritage mirroring the history of aviation. It is the world's largest manufacturer of commercial jetliners and military aircraft, and the nation's largest NASA contractor. In terms of sales, Boeing is the largest U.S. exporter.

The global reach of the company includes customer’s in145 countries, employees in more than 60 countries and operations in 26 states. Worldwide, Boeing and its subsidiaries employ more than 1, 98,000 people - with major operations in the Seattle-Puget Sound area of Washington State; Southern California; Wichita, Kan.; and St. Louis.

ETS is a part of HR portfolio applications for Boeing employees all over the world. ETS (Employee Timekeeping System) is an online timekeeping system with both Web and IMS components and a large scale batch system that collects time by work schedule by finance charge information for Finance and Payroll.

The project lifecycle covers extensive impact analysis, identifying and categorizing mission critical, medium and low impact systems and applications, system transformation strategy, structuring and designing ,programming, system testing, implementation in the Boeing's development and live environments. Also, to continuously provide system upgrade support and tuning for performance and system related issues reported and identified.

**Responsibilities:**

* Involved in extensively developing and implementing requirements provided by business.
* Involved in writing sql queries and complex stored procedures using Microsoft sql server management studio.
* Developed the web pages Java, HTML, JavaScript, CSS, JSP, Servlets, Tag libs and J2EE technology.

Environment: J2EE, JDK 6, Spring 3.2, Hibernate 3.0,JMS, JSP1.2, JavaScript, SS,XML,XSLT, JavaBeans, JUNIT, Server 2005, log4j.

**Commerce Bank/ Java BackEnd Developer/ Chennai, India Apr 08 - Dec08**

The Commerce Bank is Leading Bank in North America for providing loans to the Commercial organizations. This application provides a complete solution for providing loans to an applicant.

This application consists of 5 modules: User Module contains login page for existing and new user, Document module for submission of requirement documents through paper form or electronics form or scanned forms, Review Module for Internal purpose of Bank for all verifications and back office jobs, Question module formore enquiries of a user or client and Compliance module. This application also generates a PDF file after submitting the filled application by a user for the future reference.

**Responsibilities:**

* Used Object Oriented Design and Object Oriented Programming concepts like Polymorphism, Inheritance, Interfaces, Generics and Collections etc
* Extensively involved in design and implementation of front-end User Interface development using HTML, DOM, CSS, JSP, JSTL, Java script .
* Created HTML and JSP’s for Graphical User Interface.

Environment: Java 1.6, Apache Struts 2.0, JSP 2.0, Servlets, HTML, CSS, XML, XSLT, XSD, Oracle 11i,Eclipse, UNIX, Windows XP.