**USHA VADDEBOINA**

**PROFESSIONAL EXPERIENCE**

* **Over 9+ Years** of experience in designing and developing **Java/J2EE** Client and Server-side Enterprise Applications using object-oriented **methodologies**, **enterprise technologies**, **frameworks** and **design patterns.**
* Experience working with different **SDLC (Software Development Life Cycle)** including Requirement gathering, Analysis, Design, Coding, Testing and Implementation like AGILE (SCRUM), TDD, and Waterfall Models.
* Extensive experience in Front-End UI technologies like **HTML4/5, XHTML, DHTML, CSS2/3(using SASS and LESS), Bootstrap, Angular 8.0, React JS** in developing dynamic and responsive web pages.
* Good experience in Client-Side Scripting like **JavaScript/Typescript, ES6** to build highly interactive web pages.
* Good technical experience on various components of **Anypoint Platform** like **Anypoint API** platform and Messaging Queues.
* Experience in designing and developing RAML based APIs using **Anypoint API** platform.
* Experience in developing **client-side validations** using **Angular 8** and in developing **Custom pipes, Shadow DOM**.
* Experience in developing network applications using **Node.js** with an **event-driven**, **Asynchronous approach** and **single threaded model** with event loops.
* Excellent **SQL** development skills to write complex queries involving multiple tables, great ability to develop and maintain **stored procedures, triggers, user defined functions**.
* Experience in applications using **SOA** architecture with **SOAP**, **Restful** Services and used **XML** for **message communication**.
* Extensively used **XML** documents with **XSLT** and **CSS** to translate the content into **HTML** to present to **GUI**.
* Developed **Micro services** based on **RESTful API** utilizing **Spring Boot** with **Spring MVC.**
* Expertise in **AWS** services including **Lambda, DynamoDB, S3, IAM, API Gateway, CloudFormation,** and **CloudWatch**.
* Managed authentication and authorization with **IAM** roles and **AWS** Cognito.
* Proficiency in optimizing serverless functions and database queries to enhance performance and cost efficiency.
* Responsible for creating efficient design and developing User Interaction screens using HTML, CSS3, Bootstrap, JavaScript, **Angular 8** and **Node JS**.
* Enhanced application performance by **Angular 8** Component based development in view of future Angular framework transitions.
* Implemented secure authentication with **LDAP OAuth2** for generating **tokens** in the application using **Spring Security**.
* Widely used various open-source MVC architecture like **Struts 2.0**, **Spring** MVC, and Object Relational Mapping (ORM) Frameworks like **Spring JPA** with **Spring Data**, **Hibernate**, **IBatis MyBatis, and Spring JDBC, jQuery**.
* Worked with **NoSQL** based **ORM frameworks** like **Mongoose Connector and Cassandra Node Driver**.
* Excellent experience with Relational databases like **MySQL, Oracle, SQL Server, DB2** and No SQL databases like **MongoDB, CouchDB and Cassandra**.
* Experience in writing complex **Queries, Stored Procedures, Triggers, Cursors**, and **Functions.**
* Involved in using **Amazon Web Services like RDS, EC2, Redshift, SQS, SNS, Cloud Watch and S3**.
* Deployed our Application on **Pivotal Cloud Foundry** which is used to reduce the development overhead by providing a ready to use platform.
* Involved in writing test cases and test plans using **TestNG**, **Spock**, **Mockito** and **Junit Power mock, HQL** embedded DB to test databases.
* Experienced in building applications using **Maven, Gradle** and **ANT tools**.
* Extensive hands-on experience in setting up **CD/CI** pipelines using **Jenkins**, **Bamboo, Anypoint Runtime Manager.**

**Technical Skills:**

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| --- | --- |
| **Programming Languages** | Core Java, C, C++, SQL, Python. |
| **Web Technologies** | HTML5, CSS3, JavaScript, AJAX, JSON, Bootstrap, jQuery, Angular 8, ExtJS, BackBone JS, Flux, NodeJS, Express JS. |
| **J2EE Technologies & frameworks** | Servlets, EJB, JSP, JSF, JDBC, SOAP, WSDL, REST, XML, XSD, JAXP, JAXB, JPA, Spring, Hibernate, Spring MVC, Spring Boot, Spring Data, Spring Batch, Spring cloud, Spring Security. |
| **Databases** | Oracle 8i/9i/10g/11i, DB2, SQL Server 2000/2005/2008, MYSQL, MongoDB, Cassandra, DyanamoDB |
| **Application/Web Servers** | Oracle Web logic, IBM Web Sphere, JBoss, Glassfish, Apache Tomcat |
| **Messaging Services** | JMS, Active MQ, Rabbit MQ, Kafka |
| **Build & Configuration Tools** | Ant, Maven, Gradle, Jenkins, Gulp, Web pack, Chef, Puppet |
| **Testing Tools** | Junit, TestNG, Mockito, Jasmine, Karma, Mocha, Chai. |
| **Version Control Tools** | GIT, SVN, CVS, Bitbucket, TFS |
| **Project Management Tools** | JIRA, Azure Devops, Rally, Microsoft Project |
| **Cloud Technologies** | AWS, EC2, EBS, S3, Docker, ECS, 3API Gateway, Cloudhub Exchange, CloudFormation, AWS Lambda, IAM. |
| **Operating System** | Windows, Linux, Unix, MS-DOS |
| **IDE’s** | Eclipse, Visual Studio, IntelliJ, Spring Tool Suite, Anypoint Studio |

**PROFESSIONAL EXPERIENCE**

**Client: Vanguard Jan 2025 – Till Date**

**Role: Sr. Full Stack Developer**

**Project Title: Indus-Index Data**

**Description:** The SOl (Securities of Interest) component of Managed SRM defines the list of securities that are relevant to front, middle and back-office fund business function on a given day. This includes fund held, benchmark constituents, securities in the ET baskets and those needed for risk/research this is integrated with the Managed SRM service, which will need to ingest and store the constituent level Key for use for all publication types. This enables index consumers to have an identifier that can be used to match across data sets. This is bounded by the ability to interact with managed SRM and incorporate any managed SRM data points into the standardized schema.

The Enriched data from the index data load with MSRM from the cache and save Index Data to S3 Ingestion partition. Approved SOl providers will submit a list of securities to a GIDM-owned S3 bucket, which will trigger the security resolution and enrichment processes. This process is to take an ingested and validated index and enrich it's securities with UKey and other market identifiers.

**Roles & Responsibilities:**

* Actively participated in Agile development processes, including daily stand-ups, sprint planning, and retrospectives.
* Designed and implemented serverless applications using **AWS Lambda** with Java for efficient, event-driven workflows.
* Developed and maintained high-performance, scalable RESTful APIs utilizing **API Gateway, Lambda,** and **DynamoDB**.
* Automated infrastructure provisioning with **AWS CloudFormation**, reducing manual effort and optimizing deployment times.
* Enhanced security through the implementation of **IAM** policies and roles to control access to **AWS** resources.
* Integrated **AWS S3** for file management, ensuring high availability and cost efficiency.
* Improved caching strategies using **Redis**, boosting application performance and minimizing database load.
* Developed scalable microservices in Java deployed on **AWS Lambda**, significantly reducing infrastructure costs.
* Built data pipelines using **DynamoDB** Streams and **AWS S3** for real-time data processing and analytics.
* Implemented **IAM** roles and policies, adhering to security best practices and enforcing least-privilege access.
* Created **CloudFormation** templates for automated environment setup and deployment.
* Enhanced API performance through **DynamoDB** query optimization and caching techniques.
* Designed an end-to-end e-commerce backend with **AWS Lambda, API Gateway, DynamoDB,** and **S3**.
* Deployed infrastructure using **CloudFormation**, ensuring consistency and reliability.
* Developed a serverless logging system with **AWS Lambda** and **DynamoDB** Streams for real-time log processing.
* Implemented **S3** lifecycle policies for efficient log archiving and management.
* Efficient in monitoring and performance tracking using **AWS CloudWatch**.
* Monitored development progress using **Jira** to maintain alignment with Agile methodologies.
* Managed code repositories and CI/CD pipelines using **GitHub** Actions and **AWS** CodePipeline, streamlining deployment processes.

**Client: Flagstar Bank, Troy, Michigan May 2020 – Dec 2024**

**Role: Sr. Java Full Stack Developer**

**Project Title: Underwriting**

**Description**: Underwriting Services aims to provide mortgage loans to the customers based on autogenerated documents that were received based on the loan application number. It systematically collects information about customer from Property, Credit Report, Asset, Real Estate and Borrower Income details. Underwriting aims to enhance applications by optimizing them to ensure they are free of production bugs. Used Bitbucket, GitHub, SonarQube, and more to comprehensively assess all applications within an organization. Subsequently, it utilizes a rule engine to analyze and calculate a maturity score for each application.

**Project Title: Fund Timers**

**Description:** Fund timers allow the wire services to run the batch Jobs. Each loan will have a primary and secondary borrowers. Utilized batch processing using Spring Batch and Tekton task runs for efficient data processing. All the jobs that ran for the scheduled time and the status reports were sent through email.

**Roles & Responsibilities:**

* Followed **Agile methodology** and involved in daily meetings, sprint planning, showcases and retrospective and used JIRA as a tracking tool for the sprints.
* Used **Splunk Tool** for debugging Issues in Production and Responsible for Developing Member Portal Application components using Java, UI Technologies such as **HTML5, CSS3, JavaScript**.
* Created REST API documentation using **Swagger** and created **Docker** compose **YAML** file and Docker file to create docker images and containers.
* Develop RAML documents using A**ny point API Platform**. Provide mocking services to application developers.
* Used different transformers, exception handling, testing & Security of **Mule soft** **ESB** endpoint through **OAuth**
* Developer **Restful API** using APIGEE platform**.**
* Use **CloudWatch** for monitoring AWS Cloud resources and the applications that are deployed on AWS.
* Node.js API server is deployed to AWS via **Docker** container service.
* **AWS EC2** instances were configured in dev and QA environments with **NodeJS**.
* Used Apache **Kafka** cluster as messaging system between the APIs and Microservices.
* Used Apache **Kafka** to aggregate web log data from multiple servers and make them available in Downstream systems for Data analysis and engineering type of roles.
* Closely worked with Application using **Node.js** libraries **NPM**, **gulp** directories to generate desired view.
* Worked with the **Node** package manager (**NPM**) along with **Gulp**.
* Used **Spring IOC, AOP, Spring Boot** to implement middle tier and at backend which helps to develop application with ease.
* Recommend and develop strategy for integrating internal security model into new projects with **Spring Security and Spring Boot.**
* Created REST micro services using Spring Boot and took part in enhancing existing Java and Spring applications.
* Deployed Mule **RAML** specs through **Cloud Hub Exchange** and ran the mocking services.
* Experience in encrypting and decrypting files for API’s through Exchange in **Cloud Hub Design Center**.
* Used **Angular 8** component router for navigation. Worked with Angular 8 directives, components, pipes, and injectables.
* Programmed in Angular to upload (post) files/images to the **AWS S3** browser from the Front-end by installing the **NPM** package of **AWS-SDK**.
* Created Typescript reusable components and services to consume REST API’s using Component-based architecture provided by **Angular 8**.
* Involved in the development of services with **Angular 8** injectable property, as to make the service available for dependency injection when creating components.
* Created new entities and **JPA** repositories using Spring JPA and created REST validations for XML and JSON requests for REST controllers.
* Developed microservices on boarding tools and **Jenkins** allowing for easy creation and maintenance of build jobs and Kubernetes deploy and services.
* Involved in writing **SQL scripts** and creating backend database tables for complex business operations.
* Involved in writing queries, stored procedures and modifications to existing database structure as required per addition of new features.
* Used Microservice architecture with **Spring Boot** based services interacting through a combination of **REST** and **Apache Kafka message brokers**.
* Developed queues using **AWS SQS with JMS** for services to subscribe and listen to events using **Spring JMS**.
* Created cloud formation templates in setting up **DEV, QA and UAT** environments using **AWS** Cloud formation and leveraged Elastic container services to run Docker micro services in **AWS**.
* Worked on **Log4j API** for logging in development, testing and production environments, configured to send email notifications.
* Worked with **SASS** to build better and optimized Style sheets.
* Creating and managing schema objects such as **tables, views, indexes, stored procedures**, and **triggers** & maintaining Referential Integrity
* Used **Spring Boot** which is radically faster in building cloud **Micro Services** and developing **Spring** based applications with very less configuration.
* Migrating existing applications into **REST** based **Micro services** to provide all the **CRUD** capabilities using **Spring Boot**.
* Used **Swagger** specification for documenting **REST** APIs which exposes description of a **RESTFUL** web service to different clients.
* Deployed the Dockerized **Spring Boot** application using **AWS Elastic Beanstalk (EBS).**
* Authenticating Users and to provide the security to **RESTful** web services using **OAUTH 2.0**

**Environment:** Angular 8,HTML5, CSS 3, JavaScript, AWS S3, RESTful Web Services, Web Pack, Spring Boot, Jersey, Micro Services, Rest Services, AWS, GitHub, JIRA, Jenkins Anypoint Studio.

**Client: The Vanguard Group, Malvern, PA June 2019- May 2020**

**Role: Java Full Stack Developer**

**Project Title: Market Data**

**Description**: Market Data project focus on generating the real-time data which utilizes the wide range of infrastructure. It aims to collect the market value of stock prices, currency exchange rates to get the real-time data and delayed data. Real-time data provides most accurate info and allows investors and traders to make decisions based on current market conditions. Integrating Evaluating the real-time market data with data accuracy, timeliness, reliability, consistency and the standards.

**Roles & Responsibilities**

* Followed **Agile** methodology and involved in daily **SCRUM** meetings, sprint planning, showcases and retrospective and used **JIRA** as a tracking tool for the sprints.
* Designed the responsive front-end screens using **Angular 6, HTML5, CSS3, JavaScript, Typescript, jQuery and Bootstrap.**
* Created various **Angular 6** services, modules, pipes, attribute directives and worked with both template and data driven forms.
* Took part in setting up the routing configuration using **Angular 6** UI router for various views and sub views and **Angular CLI with Web Pack** to perform builds and create production ready code for deployment.
* Worked on Components, Directives, Services, Forms, Http Access, Authentication, optimizing an **internal** application using **Angular 6** with Modules and Offline Compilation.
* Implemented features such as routing, data binding, data updates without a page refresh using **Angular 6.**
* Used **Angular 6 Http services** for asynchronous validations for the input fields of the forms with the data that existed in the database.
* Consumed **REST** services using jersey web resources for various **HTTP** methods and developed **REST** services using **Node-JS, Express, Underscore, body-parser** and **mongoose** for another internal application.
* Created various unit test cases to test pipes, services, components with **Jasmine and Karma**.
* Extensively used **Core Java collections, Generics, Exception handling, Design patterns** for functionality, also worked on Java functional programming concepts, **lambda** expressions.
* Developed scalable applications using the **MEAN** (**Mongo-DB + Express.JS + Angular.JS + Node.JS**) **stack** and created POC's for rest service development using **Node.JS, Express.JS and MongoDB**.
* Developed **RESTful services** using **Express-JS** and used express middleware for authentication and authorization.
* Using **Spring Boot** which is radically faster in building **Microservices** and developing Spring based applications with very less configuration.
* Configured **Package .json** for application development and deployment dependencies and used **Node NPM** to set it up.
* Developed business components using **Spring boot, IOC, AOP**, Spring annotations and created user detail service for authentication and access control **using Spring LDAP** and **Spring Security.**
* Developed **hibernate** ORM mappings using **Hibernate** and **JPA** annotations to map java classes to database tables.
* Developed hibernate inheritance mapping using single table approach and configured multi-level caching in **Hibernate**.
* Writing and retrieving files to and from **AWS S3 bucket** for UI to render data faster that involves complex and time-consuming server-side logic.

**Environment:** Spring MVC, Microservices, Spring boot, JPA, Hibernate 4, AWS S3 bucket, Angular 6, MongoDB 3.2, Express JS 4, Node JS 5, REST, JUnit, Jenkins, Selenium, Mockito, S3 Bucket Maven, XML, JIRA, Ajax, XSD, java Script, Karma, Typescript, jQuery and Bootstrap.

**Client: Nationwide Insurance, Harleysville, PA Nov 2018-June 2019**

**Role: Full Stack Developer**

**Project Title: Service Bench**

**Description**: The Service Bench application facilitates collaboration between Agents and policy holders to deliver high-quality service to consumers. Serving as a centralized hub, it acts as a singular point of contact, receiving customer requests on claims and monitoring service progress until completion.

**Roles & Responsibilities: -**

* Designed and developed the UI using spring view components, **JSP, HTML, CSS, jQuery** and **AngularJS.**
* Developed queues using **AWS SQS** with **JMS** for services to subscribe and listen events. Implemented logic to listen and to subscribe events.
* Also used **jQuery** Mobile in designing responsive web sites.
* Used spring validator framework for client side and server-side validation. Also implemented dynamic loading of **JSP using** **AJAX.**
* Create **RFP (Request for Proposal**) **microservices** to provide **Restful API** and **RAML** utilizing **Spring Boot** with **Microservices.**
* Built Spring based Java and Scala **microservices** to support enterprise web applications.
* Used **Spring** Core for **Dependency Injection/Inversion Of Control (Ioc**), and integrated frameworks like **Struts** and **Hibernate**.
* Utilize **Struts** (**MVC2**) framework and developed **JSP** pages, Action Servlets and **XML** based action-mapping files for web tier.
* Wrote **stored procedures** to get the fields required for the reports.
* **Docker** is used for creating images that are deployed on **AWS.** Configured **Docker** container for branching purposes.
* Used **Java script** for validation of page data in the **JSP** pages.
* Created continuous integration system using **SVN**, **Maven**, **ANT** and **Jenkins**.
* Used **Struts** Framework in the application which is based on **MVC2** design pattern.

**Environment:** Java 8, J2EE, HTML5, CSS3, Angular Js, Node Js, JSP, Spring MVC, AWS, ANT, Maven, Jenkins, JavaScript, Bootstrap, JDK 1.7, tomcat 7, Servlets, Spring 3.0, MVC, Oracle Database SQL, Mithra, Elasticsearch, JIRA, Confluence.

**Client: Anthem, Indianapolis, IN May 2016- Oct 2018**

**Role: Sr. Java Developer**

**Project Title: App Insights**

**Description:** App Insights aims to enhance applications by optimizing them to ensure they are free of production bugs. It systematically collects data from various sources such as Datadog and more to comprehensively assess all applications within an organization. Subsequently, it utilizes a rule engine to analyze and calculate a maturity score for each application.

**Roles & Responsibilities: -**

* Used **OOAD** for building applications.
* Involved in gathering **business requirements, analyzing** the project and creating **use Cases** and **Class Diagrams**.
* Created **sequence diagrams, collaboration diagrams, class diagrams, use cases** and **activity diagrams** using **Rational Rose** for the Configuration, Cache & logging Services.
* Developed highly efficient algorithms in **C++** through both pair-programming and independent work.
* Designed and developed the project using **MVC** design pattern and developed front end using **Spring MVC** framework, business components using **Spring**.
* Developed **Spring MVC** validators to perform server-side business object validations.
* Implemented **Tiles** based framework to present the layouts to the user and has developed UI using view tags (HTML), **JSP, JavaScript, CSS**.
* Implemented **Generic DAO** using **Spring JDBC** to handle database operations on Similarly Constructed
* Developed **RESTful API** with **Spring** Framework for benchmarking purposes.
* Implemented **Spring** framework in the presentation tier for all the essential control flow, business level validations and for communicating with the business layer.
* Wrote **authentication** and **authorization classes** and manage it in the front controller for all the users according to their entitlements using **Spring security**.
* Implemented **caching** techniques, wrote **POJO classes** for storing data and **DAO’s** to retrieve the data and did other database configurations using **Spring**.
* Developed **SOAP** based **Web Services** for Integrating with the Enterprise Information System Tier.
* Developed unit test cases for the data access layer and business components using **Junit** and **EasyMock**.

**Environment:** Java/J2SE 1.5, JSP, Servlets, JAXB, XSLT, DOM, XML, Spring 3.0, Web Services, JNDI, J2EE, RSA, JBoss6.0, Rational Rose, Spring, CVS, XML, Log4J, Oracle9i, gradle, Junit, Jenkins, Junit, Rational Rose, JavaScript, DHTML.

**EDUCATION**

**Master of Engineering in** Computer Science from California, USA in 2016

**Bachelor of Technology** in Computer Science Engineering from JNTUH, India in 2014