**Karthika Krishnan**

**Senior Full Stack J2EE Engineer**

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**Professional Summary:**

* 5+ years of experience in analysis, design, development and implementation of, enterprise and web applications, with skills in wide range of Java technologies.
* **3+ Years** of experience in designing and implementation of different **J2EE design patterns** such as **Singleton, Façade, Factory, Prototype, DAO.**
* Good understanding of the Software **Development Life Cycle (SDLC)** and experience in understanding the business requirements to deliver.
* Experience with development, implementation and maintenance of large web/portal application systems using **J2EE** technologies (using **Core Java, Servlets**, **JSP, JDBC, JMS**, **Struts, Spring, Shell Scripting**, **Hibernate**, **XML, Web service, Axis, NetBeans, Eclipse, ANT).**
* Good experience in **MVC** (Model View Controller) architecture using **Struts, Spring, spring web flow, JPA 2, JTA, JNID** implementing **JSTL (JSP Standard tag library)** & **custom tag development.**
* Experience in designing and implementing different webservices based on **SOAP and RESTful.**
* Proficiency in front end development languages like **JSP, JavaScript, HTML5, CSS3, JQUERY, AJAX, JSON, DOJO, XML, XSL, XSLT, AngularJS, Angular2/4, and Bootstrap.**
* Proficient at using **React JS** to render some advanced components on the server side, along with **Flux pattern** and **Redux** library.
* Experience in **React JS** for creating interactive UI's using One-way data flow, Virtual DOM and JSX.
* Extensively worked on implementing **Single Page Application (SPA)** based on **MVC** architecture using **Angular.**
* Experience in **Responsive Web Design** using Media Queries as well as **Twitter Bootstrap**.
* Good working experience with different application/web servers such as **Apache Tomcat, WebLogic, WebSphere.**
* Experience in installing, configuring, tuning **IBM Web Sphere 6.x/5.x**, **Apache Tomcat 5.x/6.x**, **JBOSS 5.x/4. x**.
* Experience in working with different databases such as **MS-SQL, MySQL and MongoDB.**
* Expertise in database modeling and development using **SQL, T-SQL and PL/SQL** in **Oracle** and **SQL** Server environments.
* Experience in performing unit testing using **Junit, Mockito.**
* Used **JIRA** for bug tracking and issue tracking.
* Used Continuous delivery / Continuous Integration (CD/CI) tools **Docker**, **Jenkins** to deploy this application to **AWS** along with **GIT** for Version Control of code for incremental development.
* Familiar with set up auto task runner using **Grunt** for code quality, file manipulation, end to end testing and so on.

**Technical skills:**

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| **Languages** | C, C++, Java, JavaScript, SQL |
| **J2EE Technologies & Frameworks** | Servlets, JSP, JDBC, JSTL, Apache Struts, Spring Framework, Web Services (SOAP and RESTful). |
| **UI Technologies** | HTML, CSS, JavaScript, Angular JS, Angular, React JS, Node JS |
| **IDE, HTML Editor** | Eclipse IDE, Notepad++, Net Beans, My Eclipse, Adobe Dreamweaver, Edit Plus, Sublime text, Web Storm |
| **Version Controls** | Perforce, CVS, GIT, SVN, VSS |
| **Web/App Servers** | IBM Web Sphere 6.x/5.x, Apache Tomcat 5.x/6.x, JBOSS 5.x/4. x |
| **Methodologies** | Agile, Rational Unified Process(RUP), Waterfall, TDD |
| **Databases** | MySQL, Oracle 11g, SQL Server, MongoDB |
| **Operating Systems** | Windows, UNIX ,LINUX and MAC |
| **Tools** | Jira, Confluence, Selenium |

**Professional Experience:**

**Client: CAPITAL ONE, McLean, VA Jul’16- Present**

**Role: Sr. J2EE Full Stack Engineer**

**Project: Customer Services Support System**

**Description: CSSS** is a customer service support system used by a customer service agent to help the customer if there is any problem with his/her account. It is a SPA(Single Page Application). It retrieves the information regarding the customer and displays it on the dashboard used by the customer support agent.

**Responsibilities:**

* Participated in **Agile Scrum** methodology for application development. Analysis, design, coding, unit, and integration testing of business applications in an object-oriented environment.
* Used **HTML5**, **bootstrap**, **CSS3**, **JavaScript** and **Angular 2/4** toDesigned dynamic and browser compatible pages.
* **HTML**, **Angular 2**, **Bootstrap** for developing mock-up screens in the prototype to demo the application screens to business users and integrated dynamic pages using **Angular 2/4**
* Created re-usable components using custom **directives**, **filters** and used **Angular, AJAX** for asynchronous validations for the input fields of the forms with the data existed in the database**.**
* Involved in designing and developing the **JSON, XML** Objects with **MySQL** and NoSQL database like **Mongo DB**
* Consumed **REST services** using **Angular HTTP** and performed various **REST HTTP** operations for data retrievals and updates.
* Used WS-Security for authenticating the **REST** messages along with encryption and decryption along with **JSON** for data exchange between application modules.
* Published **Rest** services for performing **CRUD** operations from database. Implemented **RESTFUL** web services using spring boot and consumed using spring REST services.
* Focused on Test Driven Development (**TDD**) thereby creating detailed **JUnit** tests for every single piece of functionality before writing the actual functionality and wrote test cases to test the **Spring** DAO layer.
* Integrated **Spring** and **Hibernate**, configured logging and developed exception handling for the application**.** Used **Log4J** to capture the log that includes runtime exceptions.
* Implemented aspect-oriented programming (**AOP**) features along with **hibernate** and **Spring boot**, **dependency Injection** (DI) as well**.**
* Used Spring Core for **dependency injection/Inversion of control (IOC)** and **Hibernate** Framework for persistence onto oracle database.
* **C**reated Batch Services to generate reports using Spring Batch and used **Mockito** for Behavior Driven Development (BDD) and developed scripts for build, deployment, maintenance, and related tasks using **Jenkins**, **Docker**, **Maven.**
* Took part in developing unit test and integration test cases using **Jasmine, Karma** and **Webpack and** end to end testing using **Protractor.**
* Developed scripts for build, deployment, maintenance, and related tasks using **Jenkins**, **Docker**, **Maven.**

**Environment:** Java 1.8, Eclipse, J2EE, HTML5, CSS3, Angular 2/4, Typescript, Spring 4.0, spring boot, spring, Hibernate4, JMS, Restful Web Services, GitHub, Log4j, Selenium, Gradle, XML, Ajax, XSD, Javascript, Bootstrap, JBoss Application Server, Protractor, Jasmine, Karma, AWS, Mongo DB, Linux, Tomcat, Spring Tool Suite (STS), Jenkins, Maven, Docker, Git, Gulp

**Client: PAYPAL, CA Mar ‘16-Jul’16**

**Role: Full Stack J2EE Engineer**

**Project: GOPS**

**Description: GOPS** is a production team which provides application design and development of production fixes, application enhancements and software development in PayPal. Monitor production issue queue on a rotation basis and work with business team to prioritize, analyze and manage them to closure.

**Responsibilities:**

* Followed **Agile** methodology and involved in daily **SCRUM** meetings, sprint planning, showcases and retrospective.
* Designed dynamic and browser compatible pages using **HTML5**, **bootstrap**, **CSS3**, **JQuery**, **JavaScript, Typescript** and **Angular**.
* Developed various **Angular directives** to help build the functionality and UI behavior using **JavaScript, also** developed **filters** and angular services.
* Developed mock-up screens in the prototype to demo the application screens to business users using **HTML**, **Angular**, **Bootstrap**.
* Used **Angular, AJAX** for asynchronous validations for the input fields of the forms with the data existed in the database.
* Ensured Service design fits into overall **SOA** driven program and implemented the logging framework in the **SOA** environment.
* Extensively used **Core Java collections, Generics, Exception handling, Design patterns** for functionality, such as portfolio summary and user information also developed Services, Business Delegate, **POJO**, **Controller** and **Dao**.
* Extensively Implemented **Spring boot**, **dependency Injection** (DI) and aspect oriented programming (**AOP**) features along with **hibernate.**
* Used **JMS** (Java Mailing Service) API to mail notifications upon the success or failure when the backend processes are completed and to send mail notifications regarding any system related problems.
* Configured Spring declarative **transaction manager** and implemented transaction management in **DAO** layer.
* Implemented **RESTFUL** web services using **Spring boot** and consumed using spring REST services. Published Rest services for performing CRUD operations from database.
* Used **JSON** for data exchange between application modules along with **XML** and WS-Security for authenticating the **REST** messages along with encryption and decryption.
* Focused on Test Driven Development (**TDD**) thereby creating detailed **JUnit** tests for every single piece of functionality before writing the actual functionality.
* Used **Junit** and **Mockito** for testing the application and **log4j** for logging the application.
* Developed scripts for build, deployment, maintenance, and related tasks using **Jenkins**, **Docker**, **Maven**
* Written **Junit** test cases to test the **Spring** DAO layer and created Batch Services to generate reports using Spring Batch and used **Mockito** for Behavior Driven Development (BDD).
* Performance tuning to identify and solve possible bottle necks in the application. Ensured code quality using tools like **Find Bugs** and **Jenkins.**
* Worked on **Attlasian** products such as **Git** for Version control, **Source tree**, **Jira** for project tracking, **Confluence** for project Wiki.
* Parameterized different JVM settings to obtain optimal values for the application. Automated the deployment to each environment.

**Environment:** Agile, Core Java 1.8, Spring 4, Spring Boot, Angular-JS 1.4, HTML 5, Bootstrap, CSS, JavaScript, JQuery, MySQL, Mongo-db, Hibernate, Maven, JERSEY REST, Eclipse, NetBeans, IBM, JMS, AWS, Apache Camel, JBoss, Jenkins, Gradle, Unix,Web Service, WebSphere

**Client WESTERN UNION, CA (Offshore India) Jan’15 - Dec’15**

**Role: Software Developer**

**Project: Reference Data System**

**Description:** The Reference Data System (RDS) is the heart of Western Union. The Reference Data System contains all information about a customer who is associated with the Western Union. The information stored in the RDS of the customer is a name, address, Email, contact details and his time and date of the transaction with the Bank. The RDS support 13 applications. The applications contain two minimum server and maximum of sixty.

**Responsibilities:**

* Participated in **Agile Scrum** methodology for application development. Analysis, design, coding, unit, and integration testing of business applications in an object-oriented environment.
* Designing a user Interface by extensively used **HTML, CSS, JavaScript, Ext JS** and **JQuery**.
* Developed html views with **HTML5, CSS3, JSON** and **Ext JS**. Responsible for setting up **Ext JS framework** for UI development.
* Created **Ext JS** custom UI components and implemented UI **MVC** framework.
* Responsible for making **AJAX** **Calls** for getting the Data back as **JSON** and parsing it onto the UI and UI Interactions to the **Controller Actions** using Ext JS.
* Involved in Enhancement of existing application like creating **HTML** **navigation** menu that is role based wherein menu items changes dynamically based on the values derived from the database in the form of **XML** utilizing **ExtJS**.
* Interacted with different data providing teams by creating web-services (REST based). Created custom **REST** APIs using spring boot. REST APIs design and development - framework based on **JAX-RS**, **Hibernate** and **spring**.
* Work closely with IBM rules engine to implement custom rule explorers to parse the rules, gather the type of data used and enrich the feed with actual data.
* Troubleshooted and resolved production tickets in a timely manner. Responsible for deployments of the application in pre-production environments.
* Design and Implementing new features/enhancements. Analyzed and refactored service implementation to reduce **SLA** by applying optimized solutions.
* Created test suites and **JUnit** for different modules, collected and documented requirements for new forecasting models.
* Updated many pre-existing functional tests to reflect enhancement/changes in the code. Creating test cases with good functional and code coverages and help with automation of test suites.
* To automate the build process developed **Maven** scripts for various tasks and for the deployment of the application in JBOSS server by generating **WAR** and **EAR** files.
* Used Rally to keep track of iteration work which used to end for every two weeks. Helped in fixing bugs and maintained the current production code for other parallel projects.
* Used **Jenkins** for Continuous Development and Continuous Integration. Built, deployed various components using Jenkins fusion.
* Used Slack to communicate during daily work and while release days. Experienced on version control system **GIT**.

**Environment:** Java 7/8, HTML, CSS, JavaScript, Ext JS and JQuery, Spring, GIT, Apache Tomcat, Jenkins, IBM Rules and Decision Center, IBM Rule Designer, JRules, web services, Junit, maven.

**Client: WESTERN UNION, CA (Offshore India) Mar’14- Dec’14**

**Role: Software Developer**

**Project: Fraud Resolve**

**Description:** Fraud Resolve is a Web-based service that automates and simplifies the fraud identification and analysis work flow.

**Responsibilities:**

* Designed and implemented multi-tier applications using **Java, JDBC, HTML, CSS J2EE, JavaScript, JAXB and Struts**
* Analyzed the requirements and designed class diagrams, sequence diagrams using **UML**
* Implemented Java design patterns such as **Data Access Objects (DAO), Business Delegate,** and **Singleton**
* Strong skillset in the software development lifecycle **(SDLC)** design, implementation, analysis, deployment, and support
* Designed and developed UI screens with **Struts** using web.xml, struts-config.xml, validation.xml files for integration of all the components and to provide interactive screens for displaying data.
* Implemented the Struts framework using it as the front controller of the web application in accordance with the **MVC** design pattern
* Experience working with IBM Websphere Portal Server, **Web Logic**, and **Apache Tomcat** Application Servers
* Worked on developing web services using **SOAP, WSDL,** and used **SAX** and **XSD** for parsing and processing **XML** documents
* Experience in writing **DAO** using **Hibernate** and Hibernate mapping files
* Developed business layer to create action classes, **VO/beans** to handle user interactions through forms and further integrated this with the **WSS** framework for handling backend functionalities
* Automated **ANT** build scripts to compile and package the application and monitored the error logs using **Log4j**
* Created **shell** scripts and **PL/SQL** scripts that were executed daily to refresh data feeds from multiple systems
* Experience in software testing, **Junit** testing, regression testing, defect tracking and management using Clear Quest
* **Environment:** Windows, Unix/Linux, Java/J2ee, Websphere Application Server 5.x/6.x, WebLogic 8.x/9.x, Tomcat 5.x, Servlets, JSP (EL, JSTL, Custom Tags), JSF, Apache Struts, Junit, Hibernate 3.x, Log4J Java Beans, JDBC, ANT, ClearQuest, SQL, PL/SQL, UML

**Client: INTERGRAPH, Chennai, India. Jan’13-Feb’14 Role: Associate Software Engineer**

**Description:** Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data.

* Understanding Use requirements participating in design discussions, implementation feasibility analysis both at front-end and backend level, documenting requirements.
* Using **RUP** and **Rational Rose**, developed Use Cases, created Class, **Sequence** and **UML** diagrams.
* Application Modeling, developing Class diagrams, Sequence Diagrams, Architecture / Deployment diagrams using **IBM** **Rational** Software Modeler and publishing them to web perspective with Java Doc.
* Participation did in Design Review sessions for development / implementation discussions.
* Developed test Cases and unit testing using **Junit.**
* Coded Action classes, Java Beans, Service layers, Business delegates, to implement business logic with latest features of **JDK1**.**5** such as Annotations and Generics.
* Extensive use of **AJAX** and **JavaScript** for front-end validations, and JavaScript based component development using Framework with cross browser support.
* Developed and implemented **UI** controls and APIs and Involved in the developing functions to acquire data from API server using **AJAX**
* Appropriate use of Session handling, data Scope levels within the application.
* Integrating **Spring** injections for **DAOs** to achieve Inversion of Control, updating Spring Configurations for managing Java objects using callbacks.
* Involved in making **Spring** and **Hibernate** enhancements to existing applications.
* 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**.
* Application integration with **Spring Web Services** to fetch data from external Benefits application using **SOA** architecture, configuring **WSDL** based on SOAP specifications and **marshalling** and **un-marshalling** using **JAXB**
* Prepared and executed **JUNIT** test cases to test the application service layer operations before DAO integration
* Creating views and updating code to IBM Rational Clear case for Source code control.
* Solving QA defects, scheduling fixes, providing support to production application.

**Environment:** Java: JDK 1.5, JSP, JSP Custom Tag libraries, JavaScript, AJAX, XSLT, XML, DOM4J 1.6, DHTML, Web Services, SOA, WSDL, SOAP, JAXB, IBM RAD, IBM WebSphere Application server, IBM DB2 8.1, UNIX, UML, IBM Rational Clear case, JMS, Spring Framework, PL/SQL, JUNIT 3.8, log4j 1.2, Ant 2.7.

**Education:**

Bachelor of Technology, Information Technology, Anna University.

Master’s in computer science, Texas A & M University - Kingsville, Texas.