**Segura**

**Sr. Java Architect** [seguraj67@outlook.com](mailto:seguraj67@outlook.com) 315-538-4720

**Professional Summary**:

* **14+ years** of experience in all aspects of **Software Development Life Cycle** including requirement analysis, design specification, code development, code integration, testing, development and **DevOps** using **Java/J2EE, Open Source Software** and **Web Technologies**.
* Expertise in **Object Oriented Analysis** and **Design** using **UML artifacts** like **use cases, sequence diagrams, class diagrams**.
* Experience in architecting, design and implementation of enterprise level secure applications, **Identity** and **access management** systems to provide **Single Sign-On (SSO), Federation (SAML), WS-Security and OAuth**
* Experience in architecting, designing and developing n-tier enterprise applications using Java and J2EE technologies such as **Java, J2EE, Struts, Spring, Hibernate, Spring Boot, Web Services (SOAP and REST), XML, JSON, JAXB, JAX-RS, JAX-WS, JMS, Spring Security, Thymeleaf, JSF** etc.
* Experience with containerized **cloud** environments based on **Docker/Kubernetes** and **RedHat’s OpenShift** platform at advanced level.
* Expertise in Web application development using **HTML**, **XSLT**, **CSS**, **JavaScript** (including frameworks like jQuery, Dojo, etc.), **Ajax,** Bootstrap.
* Experience in **SAML (IDP, SP)** based authentication using **IBM Tivoli Federated Identity Manager for SAML** Federation on **WebSphere Application Server**
* **OpenIDConnect and oAuth SSO** setup and configuration for WebSphere servers. Interoperability among multiple servers, API’s, clients in hybrid architectures.
* Experience in server configuration and management for **WebSphere Application Server** (WAS) and **IBM HTTP server** (IHS) in clustered environment, including application setup, DataSource pools, JMS resources, SSL certificates, security domains, etc. In similar way, have worked with **WAS Liberty**
* Experience with **JMS** based integration mechanisms using **WebSphere MQ** and **ActiveMQ/RabbitMQ** (for testing and development use) including queue manager setup, object creation, secured connections over SSL, etc.
* Experience with **DB2 HADR** and **DPROP** features for replication and high availability (basic skills).
* Experience with **JPA** implementations like **Hibernate** and **EclipseLink** for **data persistence** layer.
* Experience in **DevOpsCD/CI** using **Jenkins**, including creation of pipelines at intermediate/advanced level.
* Experience with Apache Maven to automate application builds, including the use of different plugins like Fabric8 (for Kubernetes/OpenShift platforms), enrichers, etc.
* Experience in **JVM Performance tuning**, **GC and Heap Analysis**, Thread Dumps, Heap dumps, Memory Leaks, Connection Leaks, Core dump.
* Experience in **Unit Testing** with tools like **JUnit** and **TestNG** testing suites.
* Experience in **UNIX/Linux shell scripts** for data-driven automatic processing.
* Experience in **Agile** methodologies including **IBM’s Agile**, **extreme programming, Test Driven Developmen**t and **Scrum.**
* Experience with **SCM** tools like **GIT**, **MercurialHG**, **SVN**, **Rational Team Concert**, including configuration and management at intermediate level.

**Technical Skills:**

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| Back-end tools | JEE, EJB, Servlets, JSP, Spring Data, Spring MVC, Spring Security, Spring Integration, Spring Boot, Spring Data REST, Spring AOP, Struts, JPA (Hibernate, EclipseLink, OpenJPA), Maven, Spring Security, XML, JSON, JDBC, Quartz, Web Service (REST,SOAP), design patterns, enterprise integration patterns, eclipse IDE, JBoss Tools, Hibernate Tools, IBM Rational suit, JAX-WS, Jax-RS, Castor, Axis, CFX |
| Cloud | OpenShift, Docker, Kubernetes |
| Front-end tools | JavaScript, Ajax, Jquery/Dojo/Angular, HTML, CSS, bootstrap, |
| Application Servers | WebSphere (ND, Traditional, Liberty), JBoss. |
| Databases | DB2 (DPROP and HADR), Oracle 11/10/9 PL/SQL, MySQL, |
| Testing | JUnit, Mockito, TestNG, jmeter, rational performance tester |
| Operative Systems | Unix, Windows, MacOS, AIX |
| Others | SVN, Git, RTC, Hg Mercurial, GitHub, DevOps, Jenkins, IBM Agile, JMS, WebSphere MQ, ActiveMQ/RabbitMQ WebSphere message broker, oAuth, OIDC, SAML, SSO, JVM Performance tuning, GC and Heap Analysis, shell script, cronjobs, Design Thinking, Agile, Kanban, |

**Certifications:** IT Architect (In progress), IBM/The Open Group, 2021

**Education**: Bachelor in Computer Systems Engineer, Instituto Tecnológico de Pachuca, 2006

**Professional Experience**:

**IBM, Dallas, TX Jul, 2012 – Present**

**Sr. Java Application Architect**

**Project Description:** Maintenance and design of new modules for IBM’s Credit assessment system. System composed by multiple backend processes, web and desktop UI’s based on enterprise architecture under java platform. Use of IBM’s product portfolio (WebSphere AS, MQ, Message Broker, rational suite, DB2) and Open source technologies. Legacy system migration to cloud platform; project contemplates application containerization and gradual decoupling of functions using microservices.

**Responsibilities:**

* As Sr. Architect was actively involved in architecting various Business Layer and Data Management components of this multi-tiered java-based system over **JEE architecture**, **JMS driven solution**. Involved in both design and development. System is part of IBM’s Financing Division, and is responsible of receiving and automatically approve credit request using credit bureau information of requesters retrieved from multiple credit bureau agencies all over the world, and proprietary IBM’s algorithms.
* Currently working on project to migrate application to **hybrid cloud infrastructure** based on **containerized microservices** for **RedHat’s OpenShift platform**.
* Modernization is also being done as migration of legacy app is being performed to microservices. **Multistage Docker** and **S2I containerization** under **Kubernetes** **native** capabilities offered by **OpenShift**. Project is divided in two phases:
  + **Containerization of monolithic legacy application**: set application on **docker container** running **WebSphere application server**. Work performed consists on configuration export/import, application setup, dockerfile creation, docker image build and deploy. Project setup on **OpenShift cluster**. **CI/CD design**.
  + Gradual decoupling of functions converting them into new microservices.

Tasks for this project include architecture design, infrastructure setup, application design and framework integration. Security setup based on **OpenID Connect** and **oAuth** **token** based access across multiple servers and domains, for both application and API’s. Eureka service registry setup.

* Creation of **POC’s, Spring Boot initializers** with customized setup to be deployed on **OpenShift platform**. Customization includes **DB**, **MQ**, and reverse engineering for **WSDL** and **Database schemas**.
* Initial setup for **Angular framework** based **UI** for front end application migration.
* Development of **microservices** when executing migration to **cloud platform**.
* Managed infrastructure requirements for scalability, migration and tuning.
* Experience with **Relational DBMS** like **DB2**, **Oracle** and **MySQL**, including **PL/SQL** programming at intermediate level, performance tuning and query optimization.
* Documented all architectural processes that are part of **IBM’s methodologies**.
* Experience in **Service Oriented Architecture** (SOA), SOAP Web services, **Restful API** and **micro services** architecture.
* Involved in requirement management and solution design for several modules in system.
* Provided help to support team in order to solve software failures.
* Capacity and deployment planning for software release.
* IBM Agile professional.
* Design Thinking professional.

**Environment:** Java 6/7/8, WebSphere MQ, WebSphere Application Server(Traditional, ND and Liberty), UML, Jax-WS, Apache Axis, MQ Services, JAXB, XML, JDBC, Castor, IBM DB2 9.5+, IBM’s Rational suite (Rational Team Concert, Rational Software Architect, Rational Policy Tester, Rational Function Tester), AIX/Linux, shell scripting cronjobs, DevOps (UrbanCode Deploy, Jenkins). Spring boot 2, JPA(hibernate/EclipseLink), spring data, spring data REST, spring security, JPA, Hibernate/eclipseLink, docker, multistage build and s2i. OpenShift cloud packs, kubernetes, Git, GitHub, Jira, Netflix Eureka.

**Hildebrando, Mexico City Apr, 2010 – Jun, 2012**

**Jr. Application Architect and Sr. JavaDeveloper**

**Project Description:** Design, architect, develop and integration of new stock trading core system for Actinver brokerage firm. System composed by several background processes, web and desktop UI’s, integration modules to connect to mainframe legacy system and Mexico’s stock market main entity. System was developed under java platform (except for the desktop application) using open source technologies, Oracle’s DBMS, IBM WebSphere AS, MQ, and FIX protocol for connection to the national stock market.

**Responsibilities:**

* As Jr. Architect & Sr. Java Developer was actively involved in **architecting** various **Business Layer** and **Data Management** components of this multi-tier web based system over **JEE architecture, JMS driven solution**.
* Designed and developed the real time simulated messaging component for communication between core server application and web client interface, based on **Bayeux protocol** using **Json** formatted data and **Web2fep WebSphere package** to handle subscription based connections to broadcast feed. UI was created using **Smart GWT framework** on top of **Google’s base GWT**.
* Responsible for developing and maintaining integration services and interfaces used to provide communications among multiple components/modules interacting over the whole platform. Components includes both **SOAP** and **MQ** based, and standalone background scheduled processes (cron jobs)
* Actively participated in the development of integration modules to handle communications between System and BMV, based on **Setrib** and **FIX** **protocols**. Communication was handled using **QuckFix** and **FixFlyer** **APIs**.
* Developed various server-side components using **JEE** and **Spring Framework API’s**. Most of the components were based on enterprise integration patters (**spring integration**) and **MQ/message broker** to handle communication between them
* Experience with multiple modules from **Spring Framework** platform, including Spring **MVC**, Spring **JPA Data**, Spring **Rest**, Spring **Boot**, Spring **Security**, Spring **Integration**, Spring **AOP,** etc.
* Designed and developed multiple **PL/SQL functions**, **procedures** and **triggers** in **Oracle’s database**
* Responsible for **WebSphere AS basic administration**, maintenance and performance tuning.
* Actively participated in architecture definition and lead the system performance improvement efforts.
* Implemented application security using **Spring security component** and custom filters to handle **LDAP authentication** to client’s existing **LDAP service**.
* Responsible for setting up, configuring and manage an **SCM server based** on **Mercurial HG**.
* Created simple **DevOps pipelines** based on **Maven’s capabilities** and **jython scripts**.

**Environment:** Java 1.5, 1.6 and 7, Servlets, WebSphere MQ, WebSphere Application Server, UML, JaxWS, JAXB, XML, JSON, JDBC, Oracle 10g/11g, Eclipse IDE, SpringFramework, Hibernate, Smart GWT, RPC, Bayeux protocol/cometd, WebSphere Web2fep add-on, FixFlyer/FIX Protocol, Rest,quartz jobs/triggers, TestNG, Test Driven Design, LDAP based authentication, Maven.

**Strategysys Co. S.A., Mexico City Oct, 2009 – Apr, 2010**

**Sr. Java Developer**

**Project Description:** Senior java developer for web application to handle National Public Health System affiliations.

**Responsibilities:**

* Responsible for developing and maintaining integration services and interfaces used to handle affiliations to National Public Health System. System was created based on multiple **Spring** **framework** **components**. M**V**C was used to serve web content. **Spring data component** was used for persistence using hibernate as **ORM**. Security was implemented using **Spring security component**. View was created using SiteMesh and velocity for dynamic page templating.
* Interactive components were programmed using **jQuery javascript framework**.
* Dependency management and application build was handled using **Maven**.
* Unit testing was made using **Junit framework**.
* Actively participated in the development and integration modules to handle communications between application and National Population Registry to retrieve identity document number for people affiliated to the program. Such components include **SOAP based web services**, **JMS based integration components** using **ActiveMQ** as queue manager.
* Developed various server-side components, including Web UI using JEE and Spring Framework API’s.

**Environment:** Java 1.5/1.6, Servlets, UML, CXF, JAXB, XML, JDBC, Oracle 10g, Eclipse IDE, SpringFramework (Spring MVC, Spring Data, Spring WS, Spring Security), Hibernate, SiteMesh and velocity, Jboss Application server, HTML JSP, CSS, HTML/XHTML, CSS, JavaScript (JQuery, Dojo, prototype), ActiveMQ, Maven.

**IngeniaGroup Internet SC, Mexico City Sep, 2007 – Oct, 2009**

**Senior Java Developer**

**Project Description:** Web Portal to handle regional sales strategies for The Coca-Cola Company through all Latin America.

**Responsibilities:**

* Responsible for designing, developing, and maintaining custom **CMS portal** to handle activation and sale strategies for whole Latin America Region. Project was created under **MVC pattern** using **Struts** to handle content service.
* Created several **PL/SQL functions**, **stored procedures** and **triggers** for **Oracle database**.
* Actively participated in the design, development and integration modules to manage content in portal, including the segmentation of data according to multiple roles, localization and security access levels for employees and affiliates.
* Developed various **server-side components**, including **Web UI** using **JEE** and **Struts**.
* Velocity was used as templating engine and UI interactive components were created using **JQuery framework**.

**Environment:** Java 1.4/1.5, Servlets, UML, XML, JDBC, Oracle 10g, Eclipse IDE, apache Struts, velocity, WebSphere Application Server, Oblix/Oracle’s CoreID SSO, HTML/XHTML, CSS, JavaScript (JQuery, prototype).

**Adaptive Technologies Inc., Pachuca Hidalgo/Remote Aug, 2006 – Sep, 2007**

**Jr. Java Developer**

**Project Description:** Web Portable application to handle 360 assessments on US Navy, which is used to manage promotions.

**Responsibilities:**

* Responsible for designing, developing and maintaining custom assessment tool to present different questionnaires to any given subject’s peers in US Navy, so feedback from them could be analyzed and used on personal assessment to grant them promotions within their troops.
* Actively participated in the design, development and integration modules to manage questionnaires, catalogs, and application architecture design.
* Developed various server-side components, including **Web UI** using **JEE** and **JSP’s**.
* Designed and developed polygonal reports to display assessment results based on measured dimensions.
* Database was **MySQL** using direct **JDBC connections**.
* Polygonal reports were created using **JasperReports** reporting framework.

**Environment:** Java 1.4, Servlets, XML, JDBC, MySQL 5.3, Eclipse IDE, Apache Tomcat, HTML/XHTML, CSS, JavaScript (JQuery, prototype), JasperReports.