## VISA STATUS: VISA OPT

# Please send DIRECT CLIENT Requirements ONLY LOOKING FOR CONTRACT / CORP-TO-CORP POSITIONS ONLY

STRICTLY NOT INTERESTED IN FULL-TIME POSITIONS

## Jiajun (Jerry) Ren 872-529-8602 JERRY.567REN@OUTLOOK.COM

#### **SUMMARY:**

- Professional experience as a Full Stack Java Developer in designing, implementing, deploying and testing Web Applications and Microservice using Java Platform and Spring Ecosystem in various domains such as Banking & Finance system, Delivery system, E-commerce system, and Healthcare software.
- Solid knowledge of Core Java concepts like OOP, Multi-Threading programming, Annotations, Concurrent Framework, I/O System, and Exception Handling along with Java 8 new features like Functional Interface, Lambda Expressions, and Stream API and other versions like Java 10, Java 11 and Java 17.
- Deep understanding of **Data Structure** such as collection, map, stack, tree, graph and **Algorithms** like Binary Search, Divide and Conquer, DFS/BFS, Greedy Algorithm, Dynamic Programming.
- Expertise in web-based application using Java EE technologies such as JSP 2.0, JSTL 1.2, Servlet 4.0 and JDBC 4.3.
- Extensive experience and knowledge in designing and developing enterprise level applications and Microservices architecture using Spring Ecosystem like Spring Core 5.x, Spring MVC 5.x, Spring Boot 2.x, Spring JPA, Spring Security 5.x, Spring AOP, Spring ORM, Spring Streams and Spring Cloud.
- Proficient understanding of using Spring Cloud 2.x for Microservices deployment and Auto configurations like Netflix Eureka, Ribbon, Hystrix and Zuul.
- Good understanding in **Spring Security 5.x** with **OAuth 2.x**, **SAML 3.x**, **JWT** and **Single Sign-On** for authentication, authorization and user management.
- Good knowledge in Socket programming about HTTP/TCP protocols, serialization, BIO/NIO models
  etc. with the experience in using Netty 4 framework to simulate the communication between server sides
  and client sides.
- Good understanding about the idea and usage of RPC frameworks and have working experience in using Dubbo 3.0 to achieve service and API registry in large systems.
- Strong experience in designing and handling REST APIs in Web Services using different languages like Java, GoLang and Python.
- Hands-on Experienced in Object Relational Mapping (ORM) using Hibernate 5, Mybatis 3 and Spring
  Data JPA frameworks.
- Highly-skilled in Relational Database management and procedure writing in MySQL 8.x, SQLite 3 and Oracle 12c.
- Strong knowledge and hands-on experience of NoSQL Database like MongoDB 4.x, Redis 5.x and Amazon DynamoDB.
- Solid knowledge in using Message Brokers for Microservices notifications such as RocketMQ 4.9, Pivotal RabbitMQ 3, ActiveMQ 5 and Apache Kafka 2.x to create topics, producers and consumers and achieve synchronous and asynchronous messages.
- Profound experience in Amazon Web Services such as EC2, S3, Relational Database Services (RDS), DynamoDB, Elastic Load Balancers and AWS Lambda Expression and Google Cloud Platform like Google Cloud Storage (GCS) and Elasticsearch Cluster.
- Developed UI web applications using HTML 5, CSS 3, JavaScript 2, jQuery, AJAX and utilizing frameworks like React 16, Angular 9 and Bootstrap 3.
- Experienced on CI/CD practices and tools like Git 2 for environment and version management, and Docker for deployment.

- Hands-on experience in using build tools like Apache Maven 2/3 for managing projects' build, reporting and documentation.
- Strong understanding in **Test Driven Development** with unit testing by **Junit 5** and **Mockito 2**, automated testing by **Java Selenium 3**, defect tracking with **JIRA 4** and API testing using **Postman**.
- Experienced in Software Development Life Cycle (SDLC) methodology, including WaterFall and Agile Scrum.
- Good knowledge in Machine Learning and Deep Learning with abundant experience in using Python (Numpy, Pandas, Tensorflow, PyTorch, Jupyter Notebook) to train models.
- Good knowledge in using GoLang to develop web applications by handling REST APIs and combining with other technologies like MQ and ElasticSearch.

#### **TECHNICAL SKILLS:**

**Programming Languages** 

Java 8/10/11/17, JavaScript ES5/ES6, SQL12 Python 3, GoLang 1.19, Kotlin 1.4

**ORM Frameworks** 

Mybatis 3, Hibernate 4

**UI/Web Technologies** 

HTML 5, CSS3, jQuery 3, Bootstrap 3 JSON, XML, Node.js, Redux React 16, Angular 8

**Spring Cloud** 

Netflix Eureka 1.9, Ribbon 2.2, Zuul 2.1 Hystrix 1.5, Spring Cloud Stream

Web/App Server

Tomcat 8/9, Apache HTTP Server 2

**Message Services** 

ActiveMQ 5, RabbitMQ 3, RocketMQ 4 Kafka 2

**Design Pattern** 

Factory, Singleton, DAO, MVC Worker Thread, Producer – Consumer

**Version Control Tools** 

Docker, Maven 2/3, Gradle 5, Git 2 Jenkins 2

**Operation System** 

Windows 10, Linux (CentOS 7)

**Database** 

MySQL 8, Oracle 12c, MongoDB 4 SQLite 3, Redis 5, Amazon DynamoDB

**J2EE Technologies** 

JSP 2, Servlet 3, JDBC 4, JPA 2, JMS 2

**Spring Ecosystem** 

Spring 4/5, Spring MVC 4/5, Spring Boot 2

Spring Cloud, Spring Cloud Streams, Spring JPA

Spring Security 5

**Spring Security** 

OAuth2, JWT 3, SAML 3 Single Sign-On

**Cloud Technologies** 

EC2, S3, ELB, RDS, GCP, GCS

**Other Middleware** 

Zookeeper 3, Netty 4, Dubbo 3

ElasticSearch 8

**Development IDEs** 

Eclipse 4, IntelliJ IDEA, VS Code, Android Studio

PyCharm, GoLand

**Testing Tools** 

JUnit 4/5, Mockito 2, JMeter 5, Postman

Java Selenium 3, JIRA 4

Other Methodologies

Agile Scrum, OOD, Android Development

#### **PROFESSIONAL EXPERIENCE:**

Ever Bank Los Angeles, CA

**Project: Customer Relationship Management Web Application Upgrading** 

Role: Java Full Stack Developer Dec 2022 - Till Date

**Description:** 

Ever Bank is a financial services organization which provides banking, mortgages, and investment throughout the United States. My project is to develop and upgrade the Customer Relationship Management web application of Ever Bank. With the CRM system, it hopes to track the customers' requirements, make in time follow-ups and improve customers' satisfaction. What we did is adding and upgrading several modules, such as Forecasting, Tracking, Predictive Dialer and etc. Our team was responsible for dividing the whole project into several microservices based on the function and implemented them. We also improved the efficiency, availability, scalability and failure tolerance of this management system.

#### Responsibilities:

- Implemented Microservices architecture using **Spring Boot**, **Spring Cloud**, **Spring Security**, **Angular** and deployed it to **AWS**.
- Configured Single Sign On to provide authentication, authorization and access-control features for Application with Spring Security SAML.
- Deployed Eureka Server for microservice registration and added Ribbon to realize client-side loadbalancing.
- Worked with Netflix Zuul API gateway for Routing and Hystrix for fault tolerance.
- Implemented a distributed tracing solution using **Spring Cloud Sleuth** and **Zipkin** to monitor the API interface and connect with relational database.
- Used **MySQL** database as system of records combined with **Hibernate** to do ORM operations and used **Redis** behind the data access layer to store the hot data users engaged with as a layer of cache.
- Used Kafka as messaging service and data transmission for asynchronous inter-service communication between the Microservices.
- Involved in building single page applications using Angular 9 framework along with HTML5, CSS3 and JavaScript.
- Deployed the microservices by using **Docker** container.
- Developed unit testing using JUnit with Mockito under Test-Driven Development (TDD) environment.

#### **Environment:**

Java 11, Spring 5, Spring Boot 2.3.1, Spring Cloud Netflix 2.2.4, Spring Security 5.2.1, SAML, Hibernate 5.2, MySQL 8.0, Angular 9, HTML5, Bootstrap 4.3, CSS 3, Kafka 2.7.0, JUnit 5, Mockito 2.25, Maven 3.6.3, Tomcat 9.0, Git, Docker, AWS

Project: Tufastly

Role: Java Full Stack Developer

Los Angeles, CA

Jan 2022 – Nov 2022

#### **Description:**

Tufastly is an optimal delivery & dispatch management system. It provides the pick-up and delivery service with unmanned vehicles or drones in Los Angeles Areas. It partitions different functions for users and admins. For users, they can create a delivery order, make payment and track the pick-up or delivery status. For admin, they can see all orders, make statistics and update order status. One key point in this project is a routine optimization algorithm in the backend which could calculate an optimal delivery routine for a batch of orders, which saves the resource and cost.

#### Responsibilities:

- Made surveys to gather information like the map, the policy for drones and unmanned vehicles and customers' requirements and designed the produce scope and system architecture.
- Developed a web application to AWS EC2 platform based on Spring MVC.
- Designed the system databases based on MySQL and deployed it to AWS RDS for better control and management.
- Designed and implemented its persistence interfaces and implemented with Spring Data JPA and Hibernate to perform CRUD operations.
- Utilized Spring Security to achieve user register/login and worked with OAuth 2 framework for authorization of different roles and partitions users and admins to different pages.
- Extensively used core Java concepts like Multithreading, Asynchronous operations and Userdefined Exception handling to improve the efficiency, consistency and availability of the system.
- Designed and developed various **RESTful APIs** like create orders, make payments, view home pages and update information.
- Used Google Map API as the source of the map and location information in our project.
- Designed a routine optimization algorithm based on the shortest path algorithm in the backend to save the delivery sources and cost.
- Used a Realtor API to validate the effect of the algorithm.
- Integrated PayPal Sandbox API to simulate real payment environment.
- Designed and implemented a messaging system to deliver messages like the order status, payment and delivery using Apache Kafka.
- Built the user and admin pages using **React 16** framework.
- Used Maven for dependency management, Junit for unit test, Postman for API validation and JIRA for bug reporting.

- Used **Docker** to build the project for deployment.
- Configured AWS Route for DNS service, AWS ELB to handle load balancing and AWS S3 to manage stored files.
- Worked closely with other team members and used Git for better version control and unified property files.
- Worked as the Agile Scrum pattern of the Software Development Life Cycle and participates in requirement analysis, designing, coding, and testing.
- Used Git for version control and JIRA for bug reporting.

#### **Environment:**

Java 8, Maven 3.5.4, Spring 5, Spring MVC, Spring Data JPA, Hibernate 4, MySQL 8, OAuth2.0, Junit 4, Kafka 2.7.0, AWS EC2, S3, Route V4, ELB, Docker, Git, HTML5, CSS3, React 16, Tomcat 9.0, JIRA 4, JUnit 4

Alibaba Corporate – CTO line

Hangzhou, China

Project: Kaola System Developing and Upgrading Role: Java Backend Developer

Sep 2020 - Aug 2021

#### **Description:**

Alibaba is one of the biggest E-commerce and Technology company in China and throughout the world. It provides the e-commerce platform just like Amazon store and could handle billions-level concurrency during a promotion. Kaola platform is also an e-commerce system which aims at selling import goods. My project was focus on developing and upgrading one part of the Kaola system, that is an image generation system called Van Gogh. In specific, I needed to create new functions and features to support the coming big promotion and new activities. I also needed to discuss with my colleague on the operation side and front-side to agree on the pattern and features of the system.

#### Responsibilities:

- Worked with colleagues in the front-end and operation side and discussed about the new features and samples generated by the system.
- Upgraded the picture generating system using Java, Spring Core and Spring Boot.
- Implemented new functions strictly based on Interface Oriented Programming and code norms to improve the scalability and reusability of the code.
- Implemented the RPC framework **Dubbo** to achieve the service and interface registry and maintenance so that different projects can be communicated and invoked by each other.
- Used RocketMQ as a message system to transform the messages like data retrieval, picture done and communication between different projects.
- Used **Kafka** to record the log information to help track and debug.
- Used **Redis** between the front side and the data access layer as a cache for quicker response time.
- Used MySQL as the database of the whole system and used Mybatis as the ORM framework.
- Supported the frontend side and built a project supporting the picture shows in the frontend using Multithread Programing and Asynchronous operations.
- Worked with JUnit and Mockito unit test framework to write unit tests and test the basic function and used JMeter to test the performance.
- Used **Maven** as a build to build the project and manage the version of used tools and used **Git** to manage the version control and cooperate with other colleagues.
- Helped upgrade the dependency of the whole teams' project and used Maven Helper to exclude the dependency when conflicted.

#### **Environment:**

Java 8, Maven 3.5.4, Spring 5, Spring Boot 2, MySQL 8, Mybatis 3, Dubbo 3, RocketMQ 4, Kafka 2, Redis 5, JUnit 5, Mockito 2.25, JMeter 5, Git

PricewaterhouseCoopers Consulting
Project: Merge company system with a laboratory system
Role: Java Full Stack Developer

Shanghai, China

Sep 2019 - June 2020

#### Description:

PricewaterhouseCoopers (Pwc) is a worldwide accounting and consulting company. Its consulting department provides other company with advanced finance, accounting, management and IT solutions. I worked in an IT

consulting group and participated in a project about a company purchased a factory. What we did was to provide the company with a new system which combines both the original company management system and the factory system. I participated in making the IT solution, designing the system as well as developing it.

#### Responsibilities:

- Developed the system with Spring Boot framework applications and implemented MVC Architecture in the backend for better module management and scalability.
- Implemented **REST API** to access the service of the system.
- Used Mybatis to achieve CRUD operations in the backend and connected the system with MySQL database.
- Implemented security features using Spring Security SAML.
- Developed message service for interaction between modules by using ActiveMQ.
- Implemented client operation UI pages using JSP, HTML, CSS as well as Bootstrap libraries.
- Developed test cases and performed unit test using **JUnit** Framework in a **Test Driven Development** (TDD) approach.
- Worked on CI/CD process for automated delivery and wrote deployment scripts for building jobs in Jenkins and Git for source control.

#### **Environment:**

Java 8, Spring Boot 2, Spring MVC, Spring Security 5, ActiveMQ 5, Mybatis 3, MySQL 8, JSP 2.3, HTML5, JavaScript 5, CSS 3, Bootstrap 4, Tomcat 8.0, Maven, Jenkins 2, Docker, Git

Philips Investment Research and Development Center Project: Healthcare Direct Report System Developing and Maintaining Role: Java Full Stack Developer Shanghai, China

Oct 2017 - Jun 2019

#### **Description:**

Philips is a world lead company who provides with advanced lighting equipment, home appliances and healthcare systems. The R&D center of Philips aims at developing healthcare software as well as the auxiliary system with the physical device like a toothbrush. My project was developing a medical direct report based on Chinese unified standards, which can be compatible with any other Chinese class A hospital. I was mainly responsible for the function like the report display, database design and statistics support. Besides, I also needed to do lots of unit test to make sure the display and the structure of the report was compliance with the standards.

#### Responsibilities:

- Participated in Agile Scrum development of SDLC to develop the software as well as did unit test, back test, integration test and automated test in each sprint.
- Developed the software in **Core Java** with **Servlet** to handle the request from the frontend and **JSP** as the display of UI.
- Extensively used advanced data structures like **Collections**, **User Defined Class**, **Enum** to simulate the complicated report structure and map them to **JSON** format for transformation.
- Created POJO for each entity, and designed consistent MySQL database tables, considering the difficult map relationships: one-to-many, many-to-one, etc.
- Used **JDBC** to perform **CRUD** operations easily by java commands.
- Designed Frontend pages using JSP, bound the data and view models and displayed the data in user-friendly pages.
- Improved the overall front-end layout and details by using **CSS patterns** to fit the direct report style and maintained **CSS libraries** for further improvement and usage.
- Worked with JUnit and Mockito unit test framework to do function and unit tests as well as acted on the page to see whether the display is correct.
- Used **Java Selenium** to write automated unit test cases so that these cases can be test automatically validated during the back test and integration test in future sprints.
- Configured the project using **Maven** to manage the dependencies easily.
- Used **Git** for version control and contributing to the cooperation with colleagues.

#### Environment:

Java 8, JDBC 4, MySQL 8, JSON, JSP 2.3, HTML5, JavaScript 5, CSS 3, Bootstrap 4, JUnit 4, Mockito 2.25, Java Selenium 3, Maven 2.7.8, Tomcat 8.0, Git

### **EDUCATION:**

- Master of Science for Operations Research Engineering Bachelor of Science for Information System and Information Management