**Ella Xu**

**SUMMARY:**

* Over 6 years of experience in software design and development of **Java/J2EE** applications with strong **Object Oriented Programming** skills.
* Strong knowledge and development skills in Core Java concepts such as **Polymorphism, Collections Framework** and **Multi-Threading**.
* Experience in using **Spring IOC, Spring AOP, SpringMVC** to develop **RESTful** web services.
* Experience in their configuration, integration and implementation.
* Experience in developing front end using **HTML**, **CSS**, **JavaScript**, **JQuery**, **AJAX**, **JSP**, **JSON** etc.
* Expertise in **OOD Methodology**. Proficient in Java **Design Patterns** such as **Singleton, Factory, Visitor** etc.
* Experience in developing **RESTful** and **SOAP** **Web Service** to provide data between different applications.
* Solid understanding of **Software Development Life Cycle** (**SDLC**) of Business applications.
* Experience in web applications servers such as **Apache Tomcat.**
* Experience in using project management and comprehension tools in software development suchas **SVN** and **Maven.**
* Experience in database such as **Oracle Database, MySQL.**
* Experience in RMDB concepts including queries.
* Familiar with **Unix/Linux** environment.
* Familiar with Network Communication Protocol, like **HTTP request(GET, PUT)**, TCP, UDP.
* Strong **Self-study** and **Trouble-Shooting** ability. An active and responsible Team Player and a capable Individual able to **Multi-Task** and handle **High-Volume** Workload.

**TECHNOLOGICAL SKILLS:**

Languages: Java, C, C++, Python, R, LaTeX, JavaScript, Ruby, Go, Markdown, Scala

J2EE Technologies: Spring IOC, Spring AOP, Spring MVC, Servlet, JSP, JDBC

Framework Tools: Spring, Spring Boot, React, Angular2, Vue, Hibernate

Web Technologies: HTML, XML, CSS, AJAX, Thymeleaf, NodeJS

Database: Oracle, MySQL, PostgreSQL, Redis

Testing Tools: JUnit 5, Groovy Test

### PROFESSIONAL EXPERIENCES:

**Incedo** -- **NJ**  **Jun 2019 -- Present**

### Java Developer

### Project: Human resource management system

This project is used for editing information of the database of all the employees in the company. It was built with Spring framework as backend and Vue framework as frontend and MySQL as the database.

### Responsibilities:

* Build a web application based on **Spring MVC** to support item search and listing (dependency injection, inversion of control, REST API etc.).
* Use **J2EE** Design Patterns such as Singleton Pattern, Factory Pattern and so on.
* Extensively implement presentation layer, controller layer, service layer, and data access object (DAO) layer using Spring and Hibernate frameworks.
* Build the **Model-View-Controller** architecture, implements actions class, implement and configure internationalization.
* Implement **RESTful APIs** and deploy on the **WebLogic server**.
* Implement security workflow via in-memory and JDBC authentication provided by Spring Security.
* Creat Java servlets with **RESTful APIs** to handle HTTP requests and responses
* Utilize Hibernate to provide better support of database operations.
* Use Spring framework and **Hibernate ORM** to implement the middle tier with **Spring IoC**, **AOP, Hibernate Dao Support** and other features.
* Design algorithms (e.g., content-based recommendation) to implement search function.
* Use Hibernate, object/relational-mapping **(ORM)** solution, technique of mapping data representation from MVC model to Oracle Relational data model.
* Test applications using **JUnit** to unit test for high quality code.

**ENVIRONMENT:** J2EE, JDK 1.8, Spring, Spring MVC, Hibernate, JavaScript, JQuery, HTML, CSS, REST, Web Services, Redis, JMS, JUnit, Oracle, Maven, Git, Linux

**BNY Mellon – New York, NY**  **Nov 2018 – Dec 2019**

### Java Developer

Project: **Customer Information System**

This project is for customers of Capital One, which records bank customer’s account information and provide CRUD functions for internal agents. Analyze the information of each account and create the monthly bills. Our team uses Spring MVC, Spring security and Hibernate to implement the whole system. My duty is to complete back-end work.

### Responsibilities:

* Involved in design phase of the project and analyzed the requirements.
* Connected to database with **JDBC** and implemented **Object-to-Relational Mapping** for Persisting layer and saved Java objects in database using **Hibernate**.
* Used Spring framework and **Hibernate ORM** to implement the middle tier with **Spring AOP, Hibernate Dao Support** and other features.
* Succeeded to design service layer using **@service** as an intermediate layer for custom business logic and integrated data from multiple sources(DAO/repositories).
* Implemented Model View Controller (MVC) architecture pattern with **Spring MVC**.
* Charted and customized login pages and formed with authentication using **Spring Security**.
* Devised display pages(view) using **JSP**, **HTML**, **JQuery** and **CSS**.
* Used **Junit** and **Mockito** for writing and running unit tests for the purpose of test-driven development.
* Used **Java Messaging Service (JMS)** for reliable and asynchronous communication.
* Used the **Redis** caching to store the JSON content from the front end for the subsequent calls to improve the system performance.
* Used **Git** as source code version control.
* Used **Maven** to manage dependencies.

**ENVIRONMENT:** JDBC, JDK 1.8, Hibernate, Spring MVC, Spring AOP, Spring Security, JSP, HTML, CSS, JQuery, Junit, Mockito, Oracle, Intellij IDEA, Git, Linux.

**Tavour** -- **Seattle, WA**   **Dec 2015 – Oct 2017**

### Java Developer

Project: **Online Product Ordering System**

This project is developed based on microservice architecture. The system is for customers to purchase items and complete orders on the website. Customers can search items based on name, then they can place order and fill in the delivery address. After customer places an order and finishes the payment, the order will be delivered to the customer. Our team uses Angular2+ and Spring boot to complete front-end and back-end work corresponding.

### Responsibilities:

* Connect to database with **JDBC** and implemented **Object-to-Relational Mapping** for Persisting layer and save Java objects in database using **Hibernate**.
* Make use of **MySQL** as databases for Persisting data.
* Design whole project Using **Microservices** architecture so that each backend service can be developed and deployed individually.
* Used **Spring Boot** framework to implement the middle tier.
* Established the web application with **Spring MVC** framework to simply implements the dependency injection pattern.
* Design **RESTful Web Service** to return required format of JSON. Use Postman to test transmission of REST API.
* Successfully use **Spring Cloud** to handle service discovery and circuit breaker.
* Found and customize registrations and login pages and forms with authentication using **Spring Security**.
* Use **Spring AOP** to give some feedback information to the customer when any exceptions happen.
* Utilize **Docker** to containerize infrastructure and **Maven** to manage dependencies.
* Teste applications using **JUnit** and **Mockito** for high quality code.
* Help Designed and developed a single-page web application using **Angular2+**.
* Use **Ajax** for asynchronous partial refreshing and request handling.
* Use **Git** as source code version control.

**MB Diversity** -- **Seattle, WA**  **Sept 2014 – Oct 2015**

### Java Developer

Project: **Inventory Management System**

This application is to design and develop an Inventory Management System. User can login the system and do stock-in and stock-out operations. Display lists and details of goods, inventory, customers and orders. Generate invoice according to stock-out information and display stock-out, sales and inventory reports monthly, quarterly and Annually. Set alarm when inventory lower than the warning value set up.

Responsibilities:

* Involve in the team to integrate the **Spring Boot, Spring Security, Spring Data JPA.**
* Design patterns are extensively used to achieve clean separation of different layers. Use different patterns like **MVC**, **DAO** and **Singleton** design patterns.
* Design and integrate the **Spring/Hibernate** persistence solution with the application architectures.
* Configure **Spring MVC** and use Annotation to manage URL mapping with controller for the communication between front-end and middle-tier.
* Involved with Spring Security to provide the user **authentication**.
* Create fully functional Rest web services supporting both **XML** and **JSON** message transformation.
* Configure **Spring AOP** for Logging.
* Use **Maven** to build and package Web Service application.
* Design and Implement Unit testing using **Junit** Framework.
* Implement the logging mechanism using **Log4j** framework.
* Deploy the application on the **WebLogic server**.
* Using Postman Client to test transmission of **REST API**.
* Collaborated with front-end group to realize application’s front-end using **HTML5, CSS3, JavaScript, AngularJS, Bootstrap, AJAX and JSON**.
* Used **Git** for version control.
* Write system level and class level design document.
* Work in **Agile** software development methodology.

**EDUCATION:**

**Masters of Science, Computer Science**

Washington State University -- Pullman, WA

**Bachelors of Science, Computer Science**

Soochow University -- Suzhou, Jiangsu Province, China