

YILONG(NICK) WU

☎ 587-372-1183 | ✉ yilongwu1117@gmail.com | 📁 Portfolio

WORK EXPERIENCE

Software Development Engineer, Intern, JD(JD.com, Inc.)

05/2022 - 09/2022

- Engaged in the back-end development of the microservice architecture e-commerce project, worked with **agile** development team.
- Used Java to develop and use **SpringBoot** as the framework, and applied some **SpringCloud** components.
- Utilized **Redis** as a cache to solve the scenario of reading more and writing less, and use MyBatis-Plus to connect the **MySQL** database.
- Used SpringCloud **OpenFeign** to implement **RPC** between services and services, used **Sleuth** and **Zipkin** for distributed tracing.
- Implemented **CompletableFuture** to achieve asynchronous running to speed up the rendering of product detail pages.
- Combined **RabbitMQ** message TTL and Dead-Letter-Exchange to realize delayed message queue (scheduled task), realize the automatic closing of expired orders and ensure the eventual consistency of the distributed system.
- Used Elastic Search as the full-text search engine, and optimize the storage structure to improve the performance of high concurrency.
- Implemented a flash sale system using Spring Schedule and **Redisson**.
- Participated in the maintenance of **CI/CD** pipeline, including **Docker**, **Kubernetes**, experienced in **Jira** and **Scrum**.

Software Development Engineer, Intern, Microsoft

09/2019 - 11/2019

- Participated in the development of an intelligent image-stitching project related to the Dunhuang Mogao Caves murals.
- Assisted senior researchers in developing scale-invariant digital image-based feature recognition, matching and fusion.
- Involved in the design, construction and development of image pre-processing pipeline.
- Independently developed histogram equalization processing, image radial distortion correction and other functions

PROJECTS

Jupiter: Personalization-based recommendation engine for events

- 📄 [Project Link \(Deploy on AWS EC2\)](#) 📄 [Github Repo](#)
- Developed a personalization-based recommendation engine for events, provided an interactive web page for users to search events, update preference and view recommended events.
- Developed the backend using java, which includes three servlets, and utilized MySQL to store user preference and event information.
- Designed a content-based recommendation algorithm to recommend events based on the categories of user's favorite events.
- Developed a web service using (Java Servlet, REST API) to fetch event data from TicketMaster API.
- Improved precision of recommendation by ordering events based on distance and matched categories.

GoCamp: A campground sharing website based on Node and Express

- 📄 [Project Link \(Administrator username: admin, password: admin\)](#) 📄 [Github Repo](#)
- Designed and developed a campground sharing website based on Node, Express, and Bootstrap.
- Parse the user input location as latitude and longitude and display the location on the cluster map.
- Use Mongoose as ORM framework, utilize MongoDB to store data, and introduce Cloudinary as cloud storage to store upload images.
- Developed a middleware with passport package to implement authentication and authorization.
- Used Selenium for web automation testing.

SKILLS AND HIGHLIGHTS

- **Strong knowledge of Java, RESTful API, SDLC, data structure, Spring framework and algorithms.**
- **Back-end: Spring Boot, Spring Cloud, Express.js, Elastic Search**
- **Message Queue: RabbitMQ**
- **Database: MySQL, Redis, MongoDB**
- **DevOps: Selenium, Sleuth, Zipkin, Kubernetes, Kubesphere**
- **Front-end: Bootstrap, Thymeleaf, Vue**
- **Tools: Docker, Jira, Scrum, Maven, Git, Sentinel, JMeter, Spring Data JPA, Hibernate, MyBatis, Mongoose,**

EDUCATION

University of Alberta, Edmonton, Canada

09/2020 - 06/2022

Master of Engineering (MEng)

Software Engineering

Chongqing University of Post and Telecommunication(Cooperation with Northern Arizona University)

09/2016 - 06/2020

Bachelor of Engineering (BEng)

Electrical and Computer Engineering