

Lin Zhu

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EDUCATION

Master of Computer Science - North Carolina State University, Raleigh, NC Exp. Dec. 2018
Bachelor of Information Engineering - Northwestern Polytechnical University, China June 2017

SKILLS

Languages: Java/J2EE, JavaScript, SQL, Python, C, C++, Ruby, R, Swift, PHP
Techniques: Spring, Node.js, Rails, Play, Hibernate, JPA, SOAP, REST, RPC, JMS, React, Angular, Bootstrap, jQuery
DB/Tools: MySQL, PostgreSQL, Redis, Git, Maven, Kafka, RabbitMQ, Docker, Tomcat, Nginx, AWS, JMeter, JUnit

WORK EXPERIENCE

Java Backend Developer Intern, *JD.com, Inc.*, Chengdu, China May 2018 – Aug. 2018

- Worked on back-end mobile & web development with Java and Spring for [JD.id](#), serving 20 million customers.
- Integrated Push Notifications on Google Progressive Web App, using ActiveMQ and Multi-threading in Java.
- Implemented REST API for A/B testing and front-end of management console with JavaScript and Bootstrap.
- Designed database schema in MySQL and implemented SOAP services, REST API for a new sales promotion.

Software Engineer, *Reebh Technologies, Inc.*, Xi'an, China Mar.2017 – July 2017

- Worked on a real-time monitoring system to track manufacturing process, decreasing manufacturing cost by 25%.
- Develop an iOS application in Swift to retrieve real-time data from server and visualize data with dynamic graphs.
- Implemented REST API in PHP and deployed a database server using MySQL & Tomcat on Linux.
- Achieved TCP/IP Socket connection in PHP for data transmission, improving system performance by 70%.

Network Engineer Intern, *FirstTo Network Technology Center*, Xi'an, China July 2016 – Aug 2016

- Achieved Load Balancing and Disaster Recovery with Nginx and analyzed logs to ensure website reliability.
- Implemented a server-side Caching on Nginx to improve page loading speed by 40%.

PROJECTS

Microservices-based E-commerce Distributed Application

- Developed an e-commerce scalable application using Spring Boot & Spring Cloud for back-end, Vue.js for front-end.
- Integrated Microservices with Eureka & Feign and achieved Load Balancing with Ribbon.
- Centralized refreshable configuration with Spring Cloud Config Server, Spring Cloud Bus, RabbitMQ and Git.
- Implemented API Gateway with Zuul & Spring Security, introducing authentication, rate limiting & dynamic routing.
- Built the application with Docker, and managed Docker containers with Rancher.

Video Anomaly Detection System, Team Leader, Intel Cup Embedded System Design Contest

- Built an embedded system using Deep Learning techniques for anomaly detection in surveillance videos.
- Implemented anomaly detection algorithm in Python and built classification models with Caffe & CUDA.
- Implemented a GUI application for management console with Python and Tkinter.
- Optimized algorithms against illumination, location and scale variations by edge and person detection with OpenCV, minimizing 60% computation and 50% storage.

Volunteer Management Web Application

- Developed a social web application with Play & PostgreSQL for back-end, Node.js & AngularJS front-end.
- Implemented REST API with JSON data in Java and introduced real-time chatting using Socket.io and JavaScript.
- Integrated Google Sign-In to improve user experience and Google Maps for easier navigation.

Find a Campground

- Developed a tour guide website with Node.js & Express.js for back-end, JavaScript & Bootstrap for front-end.
- Designed database schema in MongoDB, introducing comments and reviews on campgrounds.
- Integrated Google Maps for showing locations and implemented unit tests for TDD with RSpec.