Lin Zhu

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Github: https://github.com/zhulinn | Blog: https://zhulin.me

EDUCATION

North Carolina State University, Raleigh, NC   Expected May 2019
M.S. in Computer Science
Courses: Algorithms, Object-Oriented Development, Mobile Development, Database Management System

Northwestern Polytechnical University, Xi'an, China   June 2017
B.S. in Electronic and Information Engineering

SKILLS

- Languages: Java, Ruby, Swift, Python, PHP, JavaScript, SQL, Shell
- Web: Spring, Ruby on Rails, Node.js, Hibernate, MyBatis, Redis, Bootstrap, Maven, Tomcat, MySQL

WORK EXPERIENCE

Full Stack iOS Developer Intern, *Reebh Technologies, Inc.*, Xi'an, China   March 2017 – July 2017
- Developed an iOS app for a real-time monitoring system to keep track of manufacturing process.
- Designed dashboard, line chart and record table in Swift to display real-time data dynamically.
- Set up the back-end database server on WAMP and implemented RESTful APIs in PHP.
- Established a TCP/IP Socket connection to handler data communication between the server and manufacturers.

Network Engineer Intern, *FirstTo Network Technology Center*, Xi'an, China   July 2016 – Aug 2016
- Completed my industrial training on LAN & WAN and deployment of basic enterprise WLAN.

PROJECTS

Online Shopping Cart (Java)
- Developed a shopping web app both for buyers and sellers, with Spring Boot, Thymeleaf and Hibernate.
- Designed login and authorization functionality with Spring Security.
- Implemented buyer's shopping cart and checkout functionality with session.
- Implemented fine-grained distributed locks and memory optimization with Redis, achieving higher concurrence.

Flash Sale System (Java)
- Developed a flash sale system with Spring Boot, Thymeleaf and MyBatis.
- Optimized stored procedures and achieved memory optimization with Redis, improving concurrency by 25%.

***Expertiza* Open Source Project (Ruby)**
- Implemented team organization & bidding topics features and corresponding tests with Ruby on Rails
- Fixed existing bugs and refactored code, reducing the complexity of code by 30%.

Car Rental System (Ruby)
- Developed a web app for car rental and management with Ruby on Rails.
- Implemented search, history, reservation, check-in and check-out functionalities.
- Included car suggestion, subscription notification and multi-reservation as advanced features.
- Implemented tests with RSpec and improved the design of code by refactoring.

Video Anomaly Detection System (Python)
- Built an embedded system for anomaly detection and alarm in surveillance videos.
- Implemented a compression-based anomaly detection algorithm and achieved GPU computing with CUDA.
- Optimized algorithms against illumination, location and scale variations by edge and person detection with OpenCV, minimizing 60% computation and 50% storage.
- Developed a remote control system with Python GUI, connected with the detector through an SSH Tunnel.