

Chen Gu

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Technical Skills

Languages: Java, Python, C, C#, JavaScript, HTML, CSS, Elixir

Database: MySQL, PostgreSQL, Redis, NoSQL

Framework/Libraries: React.js, Express.js, Spring Boot, Phoenix, jQuery

Others: Git, Azure DevOps, AWS, Docker, Kubernetes, Wireshark, Junit, Jenkins, Spark, HDFS

Work Experience

Michigan State University RDP Lab

Remote

Software Engineer

Apr 2021- Current

- Participate in developing and maintaining scientific analysis tool and database for scientists to analyze scientific data
- Implement new features in backend java app under the guidance of a group of scientists, improved front end web UI
- Maintain the project **CI/CD**, ensured the latest version of software is always reflected on docker hub

Philips

Cambridge, MA

Software Development Engineer Coop

Jan 2020-Aug 2020

- Participated in cloud-based framework implementation for the project under patient Monitoring that enables predictive analytics for multiple connected healthcare application
- Enhanced Backend Java and C# application under **Spring** framework, **.NET Core**, improved front-end using **jQuery**
- Improved and corrected multiple on-premise host requirements in C#, improved response by 20%
- Analyzed and fixed security vulnerabilities in java projects using Fortify, remediated 70% of high vulnerabilities
- Developed and implemented IAM onboarding scripts in **Python** that support large scale tenants onboarding test
- Maintained services using **HTTP, REST, JSON and XML** and performed unit test on services end to end ensuring system working healthily with logging monitor
- Composed various documents including feature spec and compliance, improved documentation coverage by 30%

Selected Projects

Inventory Management System

Aug 2019

- Developed a web ERP application to track business, manipulate CRUD with the GAPP accounting principle applied
- Designed and built schema in **MySQL** on AWS RDS, applied stored procedures to facilitate order manipulation
- Created **RESTful** API, used **Hibernate** for ORM, structured web interface using Bootstrap
- Designed and implemented application in an Agile environment, created and maintained project tasks using **Jira**

Online Shopping Platform

Sep 2020

- Participated in developing an online biotech product platform for users to view, save, and purchase product online
- Implemented the app in microservice architecture under **Spring Cloud**, using **Spring Security** for authorization
- Utilized **Eureka** Server to discover service and **Feign** to call and interact with other services
- Utilized **MongoDB** as database, used **Spring Data** to query database
- Implemented caching mechanism with **Redis** to store homepage and user session data to provide smooth experience

NewsForum Web Application

Dec 2019

- Developed a SPA web forum where individuals can read and discuss news, support high(1 million) concurrency by implementing backend using functional programming language Elixir
- Built the web interface using **React.js** under Phoenix framework, implemented SPA with Redux and React-Router
- Integrated OAuth to handle authentication, utilized **WebSocket** to achieve live discussion, deployed the app to AWS

Education

Northeastern University

Boston, MA

Master of Science in Computer Science GPA:3.54/4.0

2020

Relevant Courses: Object-Oriented Design, Algorithm, Data Structures, Database, Web Development, Computer Systems, Networking, Android App Development

Northeastern University

Boston, MA

Bachelor of Science in Management Information System & Finance

2018