

# Chen Gu

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## TECHNICAL SKILLS

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**Programing 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

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### Michigan State University RDP Lab

Remote

Software Engineer

Mar 2021- Current

- Participate in developing and maintaining scientific analysis tool and database for scientists to analyze microbial Genomes
- Implement new features in java app based on requirements and needs given by 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 app under **jQuery**
- Improved Host Qualification module in C#, corrected multiple on-premise host requirements, 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

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### Online Shopping Platform

Sep 2020

- Participated in an online shopping platform for users to buy, and watch 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, use **Spring Data** to query database
- Stored homepage and user session data by implementing caching mechanism with **Redis** that improve user experience

### Inventory Management System

Aug 2019

- Developed a web ERP application to calculating ratios, manipulate CRUD with the GAPP accounting principle applied
- Designed and built schema in **MySQL** on AWS RDS, applied stored procedures and triggers to facilitate order manipulation
- Created **RESTful** API using **Servlet** in Java, used **Hibernate** for ORM, structured web interface using Bootstrap
- Designed and implemented application in an Agile environment, created and maintained project tasks using **Jira**
- Created Unit tests in Junit and maintained **CI/CD** pipeline using **Jenkins**

### 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

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### Northeastern University

Boston, MA

Master of Science in Computer Science GPA:3.54/4.0

2020

Relevant Coursework: Object-Oriented Design, Algorithm, Data Structures, Web Development, Computer System, Networking

### Northeastern University

Boston, MA

Bachelor of Science in Management Information System & Finance

2018