QIONG (JOE) PENG

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Apply for SDE internship/Co-op Summer 2022

EDUCATION

Northeastern University, Seattle, WA — *Fall 2020–**Spring 2023***

Master of Computer Sciences *– CS Align program, GPA 3.9*

Related Courses: Object Oriented Programming, Data Structure, Database Management Systems, Computer Networking, Computer Systems, Advanced Algorithms, Scalable Distributed Systems,Web Development

University of Maryland, College Park, MD — *Fall 2015– Spring 2020*

Ph.D. in Urban and Regional Planning & Design

Published 8 peer reviewed journal articles about data analytics and machine learning

CERTIFICATIONS

AWS Certified Solutions Architect Associate

AWS Certified Cloud Practitioner

WORK EXPERIENCE

Audere Inc. *Seattle, WA* — *Jul 2021 – Dec 2021*

Software Engineer Intern

- Develop **Python** tools that processing images and data which are retrieved from AWS **S3** and AWS **DynamoDB.**
- Develop **mobile apps** with AWS **Cloud services**, **Python**, **shell**, **Jira**, **linux**, **git**, and **github**.
- Prepare automation tests for the apps using **Java** and report dozens of bugs.

Northeastern University*, Seattle, WA* — *Jan 2021 – Jul 2021*

Teaching Assistant for courses: Data Structure & Computer Systems; Human-Centered Machine Learning

- Tutor students' assignments and labs in **C programming**, **shell**, **data structure**, and **training neural network model**.

PROJECT EXPERIENCE

Scalable Distributed System for Ski Lift Ride Reader @Northeastern University — *Sep 2021 – Nov 2021*

- Designed **RESTful** web application that allow ski resorts to keep track of lift overloads
- Implemented and tested on different scaling strategies in Java, including **load balancing**, **RabbitMQ**, **Kafka**, **Redis** cache and distributed databases on **RDS** and **DynamoDB**, and evaluate performance on different scaling strategies with key indexes, such as throughput, average or median request processing time and P99
- Optimized overall performance with the system structure on multi-thread client and server that utilized Kafka and Redis cache, deployed on **EC2** and adopt AWS application layer load balancer with distributed RDS

Soccer Squad Builder Web Application @Northeastern University — *May 2021 – Aug 2021*

- Designed and established **data-driven** web application with following features: provided users with functionality of current active player search, team search, player sort, team sort. The web application implements **authentication and authorization**. If you are login users you can create customized team on your own by selecting your favorite players and team strategy
- Built **RESTful** web application with **Java** and **Tomcat** servlet, utilized **MySQL** and **JDBC** to ensure data storage and accessibility
- Created front-end webpages with **JSP** and utilized **Bootstrap**, **CSS** to improve styling and formats

Checkers Game @ Northeastern University — *Sep 2020 – Dec 2020*

- Designed and developed a Checker game by using **Python**
- Adopt **Processing** to enable the computer and human interactions, record and maintain score board for players
- Realized **Artificial Intelligence** player against human player with **Monte Carlo simulation** that highly increased game difficulty

TECHNICAL SKILLS

Programming Languages: Java, Python, SQL, C programming, JavaScript, Typescript, HTML, R

Framework/Tools: VueJS, CSS, Bootstrap, Gradle, NodeJS, GitHub, Shell, Photoshop, ArcGIS

Cloud/Database/Others: PostgreSQL, MySQL, MongoDB, JSP, AWS (EC2, DynamoDB, RDS, Load Balancer, S3)