Congmin Qiu

congmin.qiu@rice.edu • 281-236-5657 • https://github.com/JobQiu • Houston, TX 77005

Education

Rice University — Houston, Texas
Master of Computer Science — *01/2018 – 12/2019*

Yonsei University — Seoul, South Korea
Exchange Student in Electrical Engineering, GPA 3.92/4 — *08/2015 – 06/2016*

North China Electric Power University — Beijing, China
Bachelor Degree in Electric and Electronic Engineering, GPA 87.37/100 — *06/2016*
   CSC Exchange Sholarship for Excellent Undergraduate Student
   National Mathematical Modeling Contest - The First Prize in Beijing

Experience

Forging.Tech (Personal Knowledge Management System). — Houston, Texas
Founder and Fullstack Engineer (KeyWord: Java, Swift, Machine Learning) — *05/2018 – Present*
- Designed a micro-service architecture and built the website using **Spring Boot**, **Spring Cloud**, MySql, Redis, jQuery and **Thymeleaf**, and deployed them on **Google Cloud**.
- Programmed a Mac Application in **Swift** to extract questions, todos and notes from keyboard input.
- Built a **CNN** text classifier in **TensorFlow** to filter more than 95% invalid questions for users and embedded it into the web application.
- Programmed a **Siamese Manhattan LSTM** model with pre-trained **Word2vec** to predict if two questions are similar and merge similar questions.
- Analyzed the user pain point and designed the product's workflow to maximize user experience.

2018 Kaggle Data Science Bowl — Houston, Texas
KeyWord: Python, Conputer Vision — *01/2018 – 04/2018*
- Built an **U-Net** and a **Mask-RCNN** model with **ResNeXt** as backbone to identity nuclei from images, ranked 206 among more than 3000 teams.

Alitrip (The Travel Department of Alibaba) — Hangzhou, China
Java Engineer, Backend (KeyWord: Java, Machine Learning) — *02/2017 – 12/2017*
- Devised and realized a dynamic mock and debug tool using **Redis**, **Janino**, and **Aspect-Oriented Programming**, which facilitated daily tests and improved developing efficiency in the team.
- Built a distributed rate limit module to protect applications from breakdown caused by high concurrency using **Redis**.
- Integrated several Airplane Companies' API into Alitrip to sell more airplane tickets on the platform to increase revenue.
- Collaborated with colleagues to build a regression module using **CART** to predict airplane tickets' price and detect abnormal orders.

Seeiner Tech. — Hangzhou, China
Java Engineer (KeyWord: Web) — *08/2016– 02/2017*
- Designed and developed a **Single Sign-On** system for company using Spring Boot, LDAP, and Velocity. And connected it with Gitlab, Jira, Confluence, wifi, and VPN.
- Designed and realized a blog recommendation system using **Collaborative Filtering**.

Yonsei Smart Grid Lab. — Seoul, South Korea
Research Assistant — *12/2015– 06/2016*
- Designed and realized a strategy to control Hybrid Energy Storage System(HESS) to smooth out the fluctuation part of the electric power generated by wind farms using **MATLAB/SIMULINK**.

Skills

Language: **Java, Python, SQL**, Swift, Shell, MatLab
Machine Learning: **TensorFlow**, Keras, Numpy, Pandas, Scikit-Learn, Spark
Database: **MySQL, Redis**
Web Develop: **Spring Boot, Spring Cloud**, JQuery, HTML, Thymeleaf, JavaScript
Other: **Git, Google Cloud, Maven**, RabbitMQ, BeautifulSoup, LaTeX, SVN