JIAWEI SONG

+1(213) 352-7594 ◇ Los Angeles, CA

jiaweisong22@gmail.com ◇ Blog

SUMMARY OF QUALIFICATIONS

Enthusiastic and detail-oriented full-stack software engineer with experience in multiple programming languages, frameworks, and cloud technologies. Earned a Master's degree in Computer Science at the University of Southern California. Passionate about web development and eager to contribute to a software engineering team.

EDUCATION

Master of Computer Science, University of Southern California   Aug. 2021-May 2023
GPA : 3.96 / 4.00. Related courses: Web Technologies, Scientific Computing and Visualization

Bachelor of Computer Science and Technology, Soochow University   Sept. 2016-June 2020
GPA : 3.7 / 4.0. Related courses: Principles of Operating System, Computer Network, Database

EXPERIENCE

Software Engineer Internship   July 2019-Aug. 2019
Suzhou Yulong Information Technologies Co., Ltd.   *Jiangsu Province, China*

- Led a team of 4 people, modified and perfected relevant features of attendance system used by 50+ staff so that administrator could edit and regulations by a Markdown editor and see work time of each staff in one table
- Wrote a demo of bulletin board system based on **Ruby on Rails**. Implemented functions such as register, log in, post, reply, edit profile and thumb up
- Got familiar with application of Ruby on Rails and Vue.js framework, gems, model–view–controller design pattern and **RESTful API**. Learned how to communicate in a team and concept of agile software development

PROJECTS

Project Management System. Developer

- Developed a full stack system based on **Spring Cloud** and utilized **React** for frontend pages.
- Designed the process engine to facilitate code reusability, enabling tailored workflow across diverse projects.
- Implemented a CI/CD pipeline using **Skaffold** for local development, **GitHub Actions** for CI tasks, and **AWS ECR** for Docker storage, with deployments managed through **Amazon EKS** and **Kustomize**.

Snake Battle. Developer Demo video

- Created a platform where users can play Snake by writing algorithms to control bots and compete with others.
- Utilized **Spring Cloud** to establish matching system and bot code running as microservices.
- Designed front-end pages with **Vue.js** and and other services with **Spring Boot**, deployed on **AWS**.

An e-commerce application using microservices. Developer

- Built a microservices architecture app with **Express**, **React**, **Docker**, **Kubernetes and MongoDB**.
- Implemented functions including authentication, buying, selling, and making payments with Stripe API.
- Tested isolated services with Jest and setup NATS streaming server as event bus.

Prime Engine. Course project Demo video

- Modified Prime Engine, a **C++** game engine, added features like frustum culling for camera, collision detection and gravity in physics system, and utilized OpenGL API to simulate wind effect
- Improved render pipeline with **D3D11** and used compute shader to create realistic water effect

SKILLS

Coding	Java, C++, Python, Ruby, SQL, HTML, CSS, JavaScript, TypeScript, LaTeX, MARKDOWN
Tools	Node.js, Spring Boot, Vue, React, Ruby on Rails, Flutter, Docker, Kubernetes, MySQL MongoDB, PostgreSQL, AWS, Google Cloud, Azure serverless Functions, Git