Zhenyuan (Ryan) Ding

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EDUCATION

University of California San Diego

Sep 2021 - May 2023

• *Master of Science in Computer Engineering* | *GPA*:3.7/4

University of Science and Technology Beijing

Sep 2016 - Jul 2020

• Bachelor of Engineering in Computer Science | GPA:3.8/4

WORK EXPERIENCE

Amazon (AWS) | Software Engineer Intern

Jun 2022 - Sep 2022

Add support for GraphQL Playground API

- Designed and implemented the database for saving GraphQL queries and schemas using DynamoDB
- Developed backend APIs to validate and process data using J2EE, Spring framework. Integrated multiple packages to implement validation functions and improve efficiency by adding caching mechanisms.
- Implemented AWS account login and authentication functions to manage data permissions
- Added new components and validation functions to GQL Playground IDE using TypeScript, React, and Redux
- Designed and refactored some backend code, improved code structure, and added unit tests

Smart Testing Tech Co. | Software Engineer

Jul 2020 - May 2021

Facial Recognition-based Laboratory Management System

- Designed RESTful APIs and implemented frontend webpages by using Vue, HTML, CSS, and JavaScript
- Designed and implemented database using MySQL. Developed backend application logic such as data processing system, signal testing system, and project management system. Deployed and tested the system using Docker
- Implemented facial recognition and authentication functions using Tencent Cloud SDK

PROJECTS

Gesture Recognition-base Game Platform

Nov 2021

- Developed database using PostgreSQL to save user's game history and gesture image data
- Implemented gesture recognition function by modifying gesture recognition model using TensorFlow.js
- Built RESTful APIs using Golang and Gin and implemented the frontend of the platform using React, AJAX
- Designed and implemented three games (Tetris, Snake, and Pacman) using JavaScript

Online Trading Platform

July 2021

- Designed and implemented web backend system using JAVA, SpringMVC, MyBatis, MySQL, and Maven
- Developed frontend webpages to display product information and user profiles using Vue and implemented online payment using Alipay API

Cell Phone Signal Test System

May 2021

- Built the system using MVC architecture with ASP.NET Core as backend and Angular as frontend framework
- Using NOPI and Aspose to generate reports (Word version). Reduced time to generate reports by 50%

Random Object-oriented Program Generator

May 2020

- Adopted a randomized model generation method that can generate models by configuring parameters of meta-model and constructed the generator using the underlying logic of Csmith and Intel Yarpgen
- Designed and implemented functions to translate models into object-oriented C++ programs

TECHNICAL SKILLS

Languages: C/C++, Java, Python, Go, SQL, HTML/CSS, JavaScript, TypeScript, C#

Frameworks & Tools: AWS, NodeJS, React, Redux, DynamoDB, PostgreSQL, MySQL, Spring, MyBatis, Maven, Docker, Git, Linux, Android, TensorFlow