Roy (Zhexuan) Li

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EDUCATION

University of Toronto - St.George

Toronto, Canada

BSc in Honours Computer Science

June 2024

• Relevant Courses: Data Structure and Algorithm, Computer Networks, Database System, Compiler and Interpreter, Artificial Intelligence, Operating System.

EXPERIENCE

Veeva Systems Toronto, Canada

QA Engineer

May 2022 - Sept. 2023

- Developed over 100 automation tests using Java Cucumber, increased the test coverage by 15%.
- Streamlined daily triaged runs and failure reporting using **Kibana**, ensured consistency of newly developed code, reduced regression issues by **20%**, and maintained high code quality.
- Collaborated with a cross-functional team in an Agile/Scrum environment, engaging in iterative development and improvement with Jira and version control system Gitlab.
- Facilitated efficient CI/CD deployments using Jenkins, improved deployment frequency by 15%.

Renxin Technology Group

Fujian, China

Software Engineer

Mar. 2021 - Aug. 2021

- Implemented **Python** scripts to automate the extraction of daily newspaper data from various websites using **Selenium** WebDriver, increasing data collection efficiency by 40% and ensuring timely, accurate updates.
- Optimized data by utilizing **Pandas** library for data processing and seamlessly importing datasets into the database using **Navicat** DBMS, improved data accuracy and reducing import time by **30%**.
- Diagnosed and resolved complex software bugs by conducting in-depth debugging sessions and implementing effective solutions, led to a 40% reduction in issue resolution time and enhancing system stability.

TECHNICAL SKILLS

Programming Languages: Python, Java, SQL, C/C++, C#, TypeScript, HTML, CSS Frameworks/Libraries: React, SpringBoot, Cucumber, Node.js, Selenium, Maven Data/Tools: Linux, Git, Gitlab, Jira, AWS EC2, VS Code, PostgreSQL, MongoDB

Other Skills: OOP, Design Patterns, Software Development Life Cycle, REST API, HTTP, JSON

Projects

Mock Database System

Jan. 2024 - Apr. 2024

- Built a key-value store database system in C++ with an LSM Tree storage structure.
- Adapted cutting-edge query optimization techniques such as Hash Buffer Pool design, Bloom Filter, and B-tree data structure. Achieved significant reduction in query time by 40%.
- Designed and tested the performance in Python and Shell, visualized result in graphics using Matplotlib.

Frontier College Reading App

Jan. 2022 - May. 2022

- Delivered enhanced functionality for Frontier College's reading app by developing and integrating new features using **Java**, improved user engagement and expanding the app's educational capabilities.
- Utilized **Spring Boot** framework and **JDBC** driver to construct project structure and database interaction.
- Deployed AWS EC2 instance and implemented a REST API to handle user metadata management, enhanced the data security and scalability. Led to a 20% reduction in user-related support issues.

Learning Path Website

Sept. 2021 - Dec. 2021

- Designed and Developed a learning path website as a team utilizing React, Node.js and CSS.
- Managed and manipulated client data using MongoDB, ensured data safety and reliability through comprehensive database management practices. Improved data integrity and reduced data loss incidents by 25%.

Conference System Software

Sept. 2020 - Dec. 2020

- Collaborated with a team to design and develop a conference management system, adhering to the SDLC, OOP and Design Patterns in Java. Applied good coding practices to ensure code reusability and maintainability.
- Specialized in engineering the **entity layer** and **user interface (UI)** using **Java** and **JavaFX**. Constructed efficient data models and defined relationships between other layers.