Jesse Zhang . Jarvis Consulting

I graduated from Concordia University with a Bachelor's degree in Computer Science. I also had an academic background in electrical engineering and experience in the industry of electric design. During my study at Concordia, I did two internships in two companies. First I worked as a QA at NetGovern and also wrote Shell scripts on Linux dealing with annotation data. Second I joined a development team at Ericsson where I focused on testing Java codes using Junit, Mockito and PowerMock. Having a deep interest in being a lifelong learner, I found that being a good software developer can provide me with great opportunities to learn and apply new technologies. Overall, I am excited to develop Software, solve challenging problems and contribute to a team.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, Junit

Competent: HTML/CSS, IntelliJ, Spring, Vim, Docker

Familiar: Python, React, JavaScript, C++, PHP

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_JesseZhang

Cluster Monitor [GitHub]: Developed to collect the hardware specifications and monitor host resource usages in real-time. Two bash scripts are run and the extracted records are inserted into a PostgreSQL database which is provisioned by Docker. The setup of the database is also automated by running a bash script. SQL queries are implemented to process the records in the database.

Core Java Apps [GitHub]:

- Twitter App: Developed a command-line Java application that allows users to search, post, and delete Tweets via official Twitter REST APIs. Followed the MVC architecture, Maven was used for the project build, SpringBoot for dependency management, JUnit and Mockito for testing, and Docker for deployment.
- JDBC App: Utilized DAO pattern to interact with the database to perform CRUD operations based on JDBC.
- Grep App: Implemented a Java application that mimics the Linux grep command. It allows users to search matching strings recursively from files in a given directory, and output matched lines to a specified file. Technologies used: Java 8, slf4j, JUnit 4, lambda expressions, docker, and IntelliJ.

Springboot App [GitHub]: Built a trading platform that allows users to manage client profiles and accounts, and execute security orders via a REST API. It also fetches free market data (stock price) from a IEX Cloud service and updates corresponding data in the PostreSQL database. The application was developed using Java and SpringBoot, managed by Maven, tested with JUnit, Swagger and postman, deployed by Docker.

Highlighted Projects

Compiler design [GitHub]: Designed and implemented a compiler for a simple programming language: built a scanner based on given lexical specifications; built a syntactic analyzer for the language specified by the grammar; implemented a semantic analyzer using the visitor pattern; implemented a code generation phase. Technologies: Java, Maven, UNIX, C, Git, dot, Jsoup.

Secure Library Book Reservation System [GitHub]: Implemented RESTful API for the business function. Technologies: Java, Maven, SQLite, JAR-RS(Jersey), Vue, Git, Postman, Curl, and JSON.

Professional Experiences

Software Developer, Jarvis (2022-present): Implemented various projects led by industry experts following the industry standard and using tools like SpringBoot, Maven, Docker, Git, Linux/Bash, PostgreSQL, IntelliJ, etc; exercised Agile practices daily with the team members throughout the projects and played the team lead role for one sprint. Followed the GitFlow model to organize the version control.

Software Developer Co-op, Ericsson, Montreal, QC (Sep 2019-Dec 2019): Worked with one production team including design, development, maintenance and innovation; added and modified more than 5000 lines of codes for test

cases, keeping the coverages on two back-end projects above 90%; technologies: Spring, Java, JUnit, Mockito, PowerMock, SonarQube, Git Bash, Gerrit, MongoDB, PostgreSQL.

Artificial Intelligence and Quality Assurance Intern, NetGovern, Montreal, QC (Sep 2018-Dec 2018): Participated in two sprints of testing, including functional, integration and regression tests using Jira, RQM and VMWare; completed annotations tasks for the training data in the first stage of machine learning; wrote scripts in shell scripts and Python on Linux for better annotations, such as duplicate files checking, duplicate or similar content checking, statistics (counting the numbers of entities, types and documents) and comparison (ensure consistency); implemented test cases of model training on AWS and Azure.

Education

Concordia University, Montreal, QC (2017-2021), Bachelor of Computer Sciences, Gina Cody School of Engineering and Computer Engineering - Dean's List (2017, 2020) - GPA: 3.94/4.30

South China University of Technology, Guangzhou, China (2010-2013), Master of Engineering - Power Electronics and Power Drives, School of Electric Power

Hunan University, Changsha, China (2006-2010), Bachelor of Engineering - Electrical Engineering and Automation, College of Electrical and Information Engineering - National Scholarship (2007), The First Prize Scholarship (2007, 2008), The Second Prize Scholarship (2009)

Miscellaneous

- Cycling: completed a one-month cycling trip (2,000km) from Chengdu to Lhasa in 2012
- Volunteer for Generations, The Yellow Door, Montreal, QC (Jun 2018-Aug 2021): visiting the seniors in the downtown Montreal area once a week