Pseudo Wang . Jarvis Consulting

I graduated from York University in October 2022 with a degree in Computer Science. Prior to university, I worked in a startup company called Emerge Labs building the front-end of projects for different customers. In this company, I learned to communicate commercially with customers and colleagues and to cooperate with other developers. During my university education, Java was the primary programming language I used, and I wrote many of my school projects in Java. This experience was not only valuable for my coursework but also helped me excel in my role as a contracted data structures lecturer at Future Up, where I taught students how to write efficient and effective code in Java. Through my tutoring role, I was able to solidify my understanding of the language, develop the ability to explain complex concepts in a simple and approachable manner, and significantly enhance my explanatory abilities, enabling me to more effectively facilitate my students' understanding of the material. I am a self-starter and motivated team player with the ability to accomplish tasks independently. Also, with reliable communication ability and strong coding skills, I'm always the team leader in various projects. Now I'm working with Jarvis and continue learning modern advanced technologies. As a software engineering developer, my long-term career goal is to attain a leadership position as a lead software engineer at a prestigious technology firm. To achieve this objective, I am actively working to augment my skills through hands-on experience and seeking out opportunities within my current company to gain valuable management experience through leadership roles.

Skills

Proficient: Java, JavaFX, Maven, JavaScript, TypeScript, Angular, JQuery, HTML, CSS, Bootstrap, NodeJS, Express, Npm, Docker, Git, GitHub, Nginx, MySQL, PostgreSQL, MongoDB, CentOS, Ubuntu, Debian, Bash Script, Agile Development, Scrum Progress, Visual Studio Code, Adobe Photoshop, Vegas Pro, CapCut, Microsoft Office

Competent: Webpack, Canvas, C Language, Arduino, Processing, Oracle Cloud, Microsoft Azure, Amazon Web Service, Google Material Design, Visual Studio, Android Studio, Adobe Premiere Pro, Adobe After Effect

Familiar: React, React Native, Vue, Vite, C#, PHP, Python, Flask, Django, Kotlin, Unity, Blender, C4D, ArcGIS

Jarvis Projects

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

Cluster Monitor [GitHub]: This project is used to record and persist the hardware specifications and resource usage of a Linux cluster in PostgreSQL. I implemented a MVP for the Jarvis Linux Cluster Administration in this project, which included single host scripts that were used to record and persist hardware specifications and resource usage of a Linux cluster into PostgreSQL. This involved writing scripts to collect server hardware information, track server usage data, and launch the PostgreSQL service and its accompanying docker container. Through my efforts, I was able to successfully deliver a functional MVP for the Jarvis Linux Cluster Administration.

Core Java Apps [GitHub]:

- I developed the Twitter CRUD Application using Java, which enables users to post, retrieve, and delete tweets on their Twitter Developer Account. The application utilizes the official Twitter REST APIs for these functionalities. To implement the application, I followed the Model-View-Controller (MVC) architectural pattern, which includes a controller layer, service layer, data access object layer (DAO), and model. The application was built using Java, Maven, Twitter's REST APIs, HTTP & JSON, JUnit and Mockito for testing, Spring for dependency injection, and Docker for containerization, which enables the application to be easily deployed on different systems.
- I developed a Java application that utilizes Java Database Connectivity (JDBC) to connect to and interact with a PostgreSQL database. With this application, clients can perform various operations such as Create, Read, Update, and Delete (CRUD) on the database. I implemented the application using Java, JDBC, and Maven to manage dependencies. Furthermore, to ensure portability and easy deployment, I containerized the application using Docker.
- I have created a Java application that emulates the functionality of the Linux grep command. The application allows for searching files in a directory and matching strings within the files, utilizing regular expressions. The matches are then outputted to another file. The application was designed using Java 8's powerful Lambda and Stream APIs, and its dependencies were managed through Maven. It was also containerized using Docker, ensuring that it can be easily deployed and run on a variety of systems.

Highlighted Projects

Combined Website Framework [GitHub]: In this project, I developed a full-stack indexing and searching framework. Initially, this project was created for a specific business purpose, but I subsequently rewrote it to make it a more versatile and general purpose framework. The framework allows users to search for popular programming languages by name or key features, and displays descriptions of the languages as search results. The sample data included in the GitHub repository consists of the top ten popular programming languages, but the framework can also be used with custom data. In addition to its indexing and searching capabilities, the framework features a back-end server built with Node.js and a MongoDB database, as well as a front-end utilizing the Express.js framework with Webpack and Google Material Design. To ensure the security and reliability of the framework, I also implemented a user verification system and injection protection measures. This framework can be deployed on cloud servers such as AWS and Azure.

GUI Othello Game [GitHub]: In this project, I created a graphical user interface (GUI) version of the popular board game Othello. The game can be played locally in both player vs. player and player vs. machine modes, with the use of JavaFX as the GUI framework. To ensure a clear separation of concerns and ease of maintenance, I employed the Model-View-Controller (MVC) design pattern in the development of this project. Additionally, I utilized several other design patterns to structure the codebase in a more efficient and maintainable way. For the machine playing mode, I developed two separate AI strategies: a greedy algorithm and a random algorithm. The game can be played with human-like intelligence with the former, or with more random and unpredictable playing style with the latter. The game was implemented with object-oriented principles, which leads to a robust and reusable design, making it easy to extend or adjust the game logic.

Command-Line Chatroom [GitHub]: In this project, I created an internet-based command-line chatroom using the C programming language. The primary focus of the project was on underlying network transmission and the implementation of custom sockets for server and client communication. I built the server-side and client-side separately, allowing for a clear separation of concerns and ease of maintenance. The chatroom can handle multiple clients, by having its own thread for each client, which improves its scalability. Additionally, the chatroom also includes features such as handling different user statuses, such as joining and leaving a room.

Windows Service Path Viewer [GitHub]: In this project, I developed a graphical user interface (GUI) program using Java and JavaFX that can be executed on Windows 10. The program utilizes the Java API to invoke the system command `wmic service` to retrieve information about Windows Services. The program provides an easy-to-use interface that allows the user to view a list of all the services running on the system, including those that are not visible in the default Windows Task Manager or Services Manager. Additionally, the program also provides the absolute path of the services to the user, which can be useful for troubleshooting and managing services. By using JavaFX as the GUI framework, this program has an elegant and modern look and feel, which provides a better user experience. The program was built with Object-Oriented design principles which lead to a clean, easy-to-maintain and extendable codebase.

Professional Experiences

Web Developer, Emerge Labs (2016-2017): As a front-end developer, works closely with designers to understand client requirements and deliver over ten interactive websites utilizing JavaScript and Canvas technologies. Emphasis on innovation and collaboration to create a compelling user experience.

Computer Science Lecturer, Future Up Inc (2019-2020): Provides supplementary instruction on Java data structures, with a focus on reinforcing material taught at York University to aid students in achieving top performance in their class, specifically within the top 10%.

Education

York University (2018-2022), Bachelor of Sciences, Computer Science

Miscellaneous

- Competitive Algorithm Coding
- Video Editing