# Karim Abboud . Jarvis Consulting

I am a recent graduate from Toronto Metropolitan University seeking a DevOps or data engineer role. With four years of education and several projects under my belt, I am passionate about building user-friendly applications that improve efficiency and productivity. My proficiency in Java, Python, and other technologies complements my strong communication and collaboration skills developed during four years in customer service across multiple teams. Prioritizing feedback and utilizing an iterative development process, my empathy for the client experience ensures that my work exceeds their expectations. I thrive in fast-paced environments where my resilience and adaptability shine, and I am eager to bring my skills and enthusiasm to your team by delivering exceptional software solutions.

#### Skills

Proficient: Java, Python, JavaScript, Linux/Bash, HTML/CSS, RDBMS/SQL (Oracle / PostgreSQL), Git/GitHub, Agile/Scrum

Competent: Docker, MongoDB/NoSQL, Maven, Spring Boot, Power BI, React, TypeScript, CI/CD

Familiar: Django, C, Jira, Zenhub, jQuery

# Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis\_data\_eng\_KarimAbboud

Linux Cluster Resource Monitoring App [GitHub]: Created and deployed a Linux cluster monitoring agent built on a Docker-contained PostgreSQL database to perform data analysis about node performance. Developed a bash script to automate creating/starting/stopping the PSQL Docker container based on arguments to the script. Automated the creation of PSQL database tables using a custom DDL script. Developed shell scripts to connect to the PSQL database and populate tables using Linux hardware monitoring commands. Automated the collection of node usage data on a one-minute interval using crontab. Built and manually tested the app in a Google Cloud Platform (GCP) provisioned virtual machine using Rocky Linux 9 as the operating system.

Core Java Grep App [GitHub]: Developed a Java application that mimics the functionality of Linux's native Grep command to recursively search files and directories to locate matches for a user-provided phrase or regular expression. Utilized the standard Maven directory layout in the process of building the application. Deployed the application using a Docker container built by an image available through Docker Hub. Manually tested the application by comparing its output to the results of Linux's grep command given the same starting directory and search parameters.

MongoDB Spring Boot Insurance App [GitHub]: Developed a Spring Boot API to interface with a car insurance database storing information about people and their vehicle ownership. This API features several custom-built calls to MongoDB queries and aggregations to retrieve relevant business data regarding potential customers. The application is built using Java and the standard Maven directory layout. Postman was used in the process of manual testing to send HTTP requests and verify the efficacy of API calls.

Power BI Dashboards [GitHub]: Constructed three Power BI dashboards, graphically depicting three sets of data. The beverage dashboard visualized a dataset describing the sales of various well-known beverage brands and their respective products in the United States. Another dashboard served as a report of data from a survey targeted at data professionals regarding their past education, experience, difficulty breaking into the industry, general happiness in their role, and the factors motivating them to seek new employment. The last dashboard visualized data pulled from the Alpha Vantage API, showcasing at-a-glance information on the current value of a particular user-chosen stock and its historical trends.

## **Highlighted Projects**

Financial Management System: Worked with an agile team operated through ZenHub to develop a financial management system with a custom GUI built using Javas JFrame class. Participated in stand-ups, sprints, task estimations, and retrospectives. Developed functionality allowing for invoice, receipt, and income source logging. Built functionality to aggregate user-provided data into a balance sheet or income statement. Built the automated testing portion of the projects CI/CD pipeline using Maven to verify commits to the GitHub repository maintained project functionality.

Replica World of Warcraft Database: Constructed an ER diagram to model the structure of a World of Warcraft user account database. Built database through SQL statements using Oracle SQL Developer. Deployed database through Docker to provide an isolated testing environment and compatibility across multiple workstations.

Custom Language Interpreter: Built and manually tested an interpreter for a custom programming language template using Java and Java Compiler Compiler (JavaCC). Provided variable and method functionality using Javas HashMap class to create a symbol table for storing variable information. Implemented call stack functionality into the language using Javas Stack class to simulate operation through multiple nested subroutines.

## **Professional Experiences**

Software Developer, Jarvis Consulting Group (2024-present): Worked with an agile team in the development process of numerous projects. Developed a Linux cluster monitoring agent to gather data on node performance using Docker, Bash, and PostgreSQL. Developed a Java application that emulates the functionality of Linux's native grep command using Maven and Docker. Created a Spring Boot API that interfaces with a MongoDB database to track car insurance information for users in the database. Participated in daily stand-ups, reviews, and retrospectives.

Customer Service Cashier, Longo Brothers Fruit Markets Inc. (2016-2020): Provided exceptional customer service in the transaction process, offering concise and accurate answers to any questions about our products and troubleshooting issues at point-of-sale (POS) terminals. Assisted in various other departments, including Produce, Dairy, Grocery, and the Garden Center, garnering a variety of experience working with multiple teams.

#### Education

Toronto Metropolitan University (2019-2023), Bachelor of Science (Honours), Computer Science - GPA: 4.19/4.33 - Dean's List (2019, 2020) - Dean's List (2020, 2021) - Dean's List (2021, 2022)

## Miscellaneous

- Provided one-on-one tutoring and administered formal lessons on the fundamentals of Java programming and objectoriented design to a class of 20 students.
- Built multiple personal computers for both myself as well as many friends over the past 12 years.
- Regularly engage in competitive raiding content on a regular schedule in World of Warcraft as part of a team of 26 players.