

# Tanya Nantsa . Jarvis Consulting

I recently graduated with a Bachelor's in Software Engineering from the University of Guelph. As a Data Analyst Intern at Scotiabank, I honed my Python, SQL, and data analysis skills. With a minor in Psychology, I bring a unique perspective to understanding user behaviour. I am passionate about problem-solving, creating a positive impact, and continuously improving my skills in Software Development. Seeking a role as a Software Developer, I bring a strong foundation in Python, Java, HTML, and SQL. Also, my strong communication, time management, and teamwork skills make me a great team addition. My attentive nature, adaptability, and passion for problem-solving make me an ideal candidate for contributing to dynamic and collaborative development teams.

## Skills

**Proficient:** Python, Java, HTML, CSS, SQL, Agile/Scrum, Git

**Competent:** Docker, JavaScript, Firebase, Linux/Bash, C

**Familiar:** React, Bootstrap, Selenium, JUnit, Ruby

## Jarvis Projects

Project source code: [https://github.com/jarviscanada/jarvis\\_data\\_eng\\_TanyaNantsa](https://github.com/jarviscanada/jarvis_data_eng_TanyaNantsa)

**Linux Cluster Resource Monitoring App** [GitHub]: The Linux cluster monitoring project resolves the Jarvis Linux Cluster Administration (LCA) team's need to manage a Linux cluster of 10 servers running CentOS 7. The project collects and stores real-time hardware specifications and resource usage data for each server in a database, enabling the LCA team to generate reports and use data analytics to make informed decisions about server additions or removals. The technologies used include Docker for the containerized deployment of the PostgreSQL database instance, Bash scripts for the data parsing and data collection on individual servers, PostgreSQL for the database, crontab for automating the bash script that collects resource usage data, and Git for version control and feature management within the project.

**Core Java Apps** [GitHub]:

- **JDBC App:** The Stock Quote Application is a Java-based application that simulates a simple stock wallet where users buy and sell stocks. The app fetches stock quotes from an external API (Alpha Vantage REST API) and store them in a PostgreSQL database. The Java application leverages Maven for various tasks such as building the project, managing dependencies, enforcing project structure, and cleaning artifacts. Java Database Connectivity (JDBC) connects the application to the PostgreSQL database. The application has Data Access Object classes like QuoteDao and PositionDao, which handle tasks like saving, retrieving, updating, and deleting stock quote data from the PostgreSQL database. Additionally, Docker is utilized to create a Docker image for the application, which is then pushed to Docker Hub for distribution and deployment. Finally, JUnit and Mockito are used for automated testing.
- **Grep App:** The Grep Java application behaves similarly to the Linux grep command, identifying string patterns within files and returning lines containing the matching pattern. The application, implemented with Java 8, utilized Maven for building the Java project (including compiling code and packaging artifacts), managing dependencies, enforcing a consistent project structure, and cleaning the package artifacts in the project. IntelliJ IDE facilitated code editing, running, and debugging. Lambda and Stream API enhanced the application, integrating lazy evaluations and concise code for increased readability. Finally, Docker was employed to build a Docker image for the app and then push the image to Docker Hub.

**Python Data Analytics** [GitHub]: This project aims to analyze customer shopping behavior for London Gift Shop (LGS), a UK-based online store. By Using data analytics, LGS wants to understand its customers better and develop targeted marketing techniques to increase revenue. The project utilized Jupyter Notebook along with Python libraries such as Pandas and NumPy for data analytics and wrangling. The provided transaction data, extracted from the LGS database, was analyzed to uncover insights into customer behavior and preferences.

## Highlighted Projects

**Personal Website** [GitHub]: A platform where I share coding and sewing projects I work on, my personal interests, and additional contact information. The website is hosted using GitHub pages. The technologies used are HTML, CSS, and JavaScript.

**Chess Game** [GitHub]: A terminal game where the user selects whether they wish to play the one-player or two-player version of the game. For the one player version, I implemented a basic chess AI which uses a min-max tree with A-B pruning for determining the computer's best moves. Made with Python.

**Image Processing Toolbox** [GitHub]: An application where users can edit and manipulate images. This toolbox allows users to crop, scale, flip, rotate, apply zero padding, change the brightness, change the contrast, apply filters, and detect edges in their images. The edited image is saved to the user's computer. Made with Python.

## Professional Experiences

**Software Developer, Jarvis (Jan 2024-present):** At Jarvis Consulting Group I gained hands-on experience with a diverse set of technologies including Linux, SQL, Git, Java, Spring Boot, REST API, Cloud Computing, DevOps, and Data Analytics using SQL and Python. Throughout this role, I collaborate with Tech Leads and Professionals, contributing to the development of projects and writing code in Java, Python, SQL, and more. Additionally, I enhanced my time management, problem-solving, and communication skills.

**Data Analyst Intern, Scotiabank (May 2022-Aug 2022):** Worked on the Behavioural Data Science team to develop a model for verifying customer home addresses and identifying traveling customers using location data. Analyzed fraud rate of traveling customers to identify significant patterns. Solutions developed from this migration analysis project are to be used by other team members on existing projects within the company. The technologies used include SQL, Python, Adobe Analytics.

## Education

**University of Guelph (2019-2023),** Bachelor of Computing, College of Engineering & Physical Sciences - Minor in Psychology - Dean's List (2020, 2021)

## Miscellaneous

- Maintains a blog to share personal sewing projects
- Crochets and knits clothes and blankets