

# Braikhna Yousafzai . Jarvis Consulting

I enjoy the growth and constant learning that comes with the software industry. I am looking to apply and grow my development and engineering skills in creative ways. I enjoy working collaboratively and across disciplines to comprehensively understand my projects and company. I appreciate team-based approaches towards a cohesive solution. I am a recent graduate from Western University with a Bachelor's degree with Specialization in Computer Science. I have worked on several Java, Python, and database management projects throughout my degree. I most enjoy the software engineering, data management, and analytic aspects of the industry. I enjoy painting, coffee, and a good book outside of work. I am also quite involved with my community in volunteering and leadership capacities.

## Skills

**Proficient:** Java, RDBMS/SQL, Agile/Scrum, Linux/Bash, Git, C/C++

**Competent:** Python, R, Docker, PHP, HTML, CSS

**Familiar:** Hadoop, NoSQL, Tableau, Crystal Reports, Scala

## Jarvis Projects

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

**Cluster Monitor** [GitHub]: Implemented a Linux cluster monitoring agent using Shell scripts inserting hardware usage data for each cluster node into a PostgreSQL database. The instance of PostgreSQL was provisioned using Docker. The data was collected in real-time using a `crontab` job. Developed SQL queries to perform data analytics for cluster resource management purposes such as determining average CPU and memory consumption and detecting node failures. Git and Github were used for version control.

## Highlighted Projects

**COVID-19 Graphing Program** [GitHub]: Programmed a C++ utility to track worldwide COVID-19 trends. COVID-19 data was pulled from an API as CSV file and converted to a JSON file using `jq` as a JSON processor. The app was developed using the Visual Studio IDE and relied on C++ STL packages for algorithms and iterators, as well as file and I/O stream libraries. The application sorts the data and plots terminal-based bar graphs of the data. Users use CLI input to request graphs related to specific trends such as countries with highest total case and countries with highest total death counts.

**COVID 19 Contact Tracing System** [GitHub]: Programmed a C++ based software allowing businesses to track incidences of COVID-19 in their establishments and automate email notifications to a customer base. The application was designed using a factory builder design pattern. An online SQL database was provisioned to host the data and SQL queries were used to select customer groups affected by potential exposures. The program connected to the database using the MySQL Connector for C++ library, which gave access to drivers and connectors for database access. Email notifications were sent out using pipes. Finally a GUI was designed using the Qt toolkit. Separate interfaces were built to isolate role-based privileges between customers, businesses, and admin. This project was a collaborative submission for an Object Oriented programming course submission. The project lifecycle was managed using agile and scrum frameworks.

## Professional Experiences

**Software Developer, Jarvis (2020-present):** Collaborated with developer, data engineers, and product managers in an agile environment. Developed projects using technologies and toolkits such as Java, SQL, Docker, Linux, Bash, PostgreSQL, and Maven. Applied Gitflow as an organizational practice to project development. Participated in scrum ceremonies, including daily scrums, sprint retrospectives, and code reviews. Also took on responsibilities as a scrum master, heading the sprint retrospectives and providing resource planning to my team.

**Data Analyst, First Canadian Title (2017-2019):** Built a reporting suite using SQL to visualize vendor performance and client KPI's. Worked as a vendor advisor and client solution consultant finding innovative strategies to achieve performance and financial goals. Collaborated with the project team in the UI design and deployment of a new vendor software. Created user stories, worked with the QA team to create and run test cases, as well as compiled a user manual for end users.

## **Education**

**Western University (2018-2021)**, Bachelor of Science, Computer Science - Dean's List (2020, 2021) - GPA: 3.7/4.0

## **Miscellaneous**

- Art, painting: host fundraising paint nights at our local mosque.
- Volunteer, Pakistani Community Association of London: VP Culture