

# Hussein Abdallah . Jarvis Consulting

Hello, my name is Hussein Abdallah! I am a graduate from the University of Western Ontario with a BSc, with an Honour's Specialization in Computer Science. I've always been interested in software, attending hackathons since high school! However, working as a Data Analyst at RBC, I realized there is so much that can be automated for efficiency. While I was there, I automated what I could with respect to the data pulls, and I loved doing this, which brought me to DevOps! Prior to this, I had worked on software development projects in a variety of languages; you can see some of my projects below!

## Skills

**Proficient:** Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, Python, Docker, Pandas, Cloud (AWS), Tableau

**Competent:** C++, Spark, Machine Learning/AI, JavaScript, Docker, Flutter/Dart

**Familiar:** R, SAS, Hadoop/Hive, NodeJS, ReactJS, Apache Airflow

## Jarvis Projects

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

**Cluster Monitor** [GitHub]: Programmed Bash scripts to track cpu, disk, and memory usage for performance purposes. Stats are pulled using various commands such as `lscpu`, `vmstat`, and `df`. The stats are isolated using regular expressions, and then stored in a postgres SQL database within a docker container. Using `crontab`, these statistics can be pulled and stored by the minute. The project was created and tested on a Rocky Linux virtual machine hosted on the Google Cloud Platform (GCP).

## Highlighted Projects

**Western Interactive Map Application** [GitHub]: Designed a Java application with a graphical interface made with Swing in which a user is able to view maps of buildings and see points of interest (POIs) of several buildings at Western University. An admin can add or remove POIs which are visible to all, or a user can add or remove their own POIs. These POIs as well as other building information are stored in JSON files, accessed using `json-simple`. The project was created by a team of four using a Waterfall methodology.

**Star Quest** [GitHub]: Collaborated with a group of students in an Agile Scrum environment to clone Flappy Bird in C++ and Qt, but changing the theme. The idea was that it would be efficient enough to be playable on the Raspberry Pi, which it was tested on. To make it efficient, I used memory saving techniques, such as reusing obstacles that exit the screen for the infinitely generated map rather than continually creating new ones.

**Just Another Platformer** [GitHub]: Developed a platformer game for a hackathon in Godot Game Engine, an engine I had never touched before. Within 48 hours, I had taught myself my way around the engine, and learned its own language, GDScript. I was able to create a working platformer with animations, enemies, different attacks and skills, sound effects and music, and a variety of levels.

## Professional Experiences

**DevOps Engineer, Jarvis (2024-present):** Consulted as a DevOps Engineer, where I used and learned a variety of skills, including Linux, Postgres, Docker, and Bash scripting. Worked on a team in a Scrum environment, attending daily Scrums with the team and having several meetings to showcase my work. I practice version control, using a development branch on our repository, and only merging to the master branch through pull requests.

**Data Analyst, RBC (2023-2024):** Migrated our automated pipeline from SAS, and automated other tasks which were using time, to Python, PySpark, Apache Airflow, Sonatype Nexus, and a Yarn cluster. Brought about change in the Mutual Funds industry by analyzing data pulled through Teradata SQL, and displayed the data using Tableau dashboards. Presented my findings to several regional managers, VPs, and RECs.

## Education

**University of Western Ontario (2020-2024),** Bachelor of Science, Computer Science - Scholarship of Distinction - GPA: 3.7/4.0

## Miscellaneous

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