

# Shahbaz Yousaf . Jarvis Consulting

I recently graduated with a Bachelor of Engineering, majoring in Computer Engineering from Toronto Metropolitan University, formerly Ryerson. Throughout my time at Ryerson, I honed my coding, problem-solving, and analytical skills through various courses and projects. My interest in software and data engineering, as well as devops, grew during my exploration of related electives. I expanded my knowledge with courses such as Engineering Algorithms and Data Structures, Fundamentals of Data Engineering, Operating Systems, and Introduction to Machine Learning. My interest in data engineering led me to a data science internship at Ansys, where I used tools like PySpark and Azure Databricks to improve the data processing within the APIP analytics system. In my final year, my capstone team and I developed a full-stack ML app, a job recommender system. This project utilized ReactJS, Django, a MySQL Server database for storing resume and job description datasets, and Python for ML and data processing scripts. I'm passionate about data engineering and devops, always learning and expanding my skills. I've completed certifications like IBM Applied DevOps Engineering and IBM Applied Data Science Professional. Currently, I'm learning AWS and aiming for the Cloud Practitioner and Solutions Architect certifications. I consider myself disciplined, highly motivated, and adaptable, thriving both independently and within a team. I enjoy challenges that push my technical and leadership abilities, viewing them as opportunities for growth. Beyond tech, my interests include basketball, strength training, MMA, gaming, and cooking/baking. Regularly engaging in these activities keeps me balanced and focused. In summary, I believe my drive, passion, and strong academic background position me as an excellent fit for your team as a Data or DevOps engineer.

## Skills

**Proficient:** Python, Java, Linux/Bash, RDBMS/SQL, Docker, Agile/Scrum, Git

**Competent:** C, PySpark, Azure Databricks, HTML/CSS, ReactJS, Django, MATLAB, VHDL

**Familiar:** AWS, GCP, Jenkins, Terraform, Ansible

## Jarvis Projects

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

**Linux Cluster Resource Monitoring App** [GitHub]: Built an MVP for Jarvis' Linux Cluster Administration (LCA) team to manage a Linux CentOS 7 cluster of 10+ servers. The project records hardware specs, monitors real-time Linux server usage data and stores data in a PostgreSQL RDBMS for analytics and future resource planning. Developed bash scripts to collect hardware and server data collection, used Docker for PostgreSQL provisioning, and leveraged Git and GitHub for version control. Configured crontab to run host\_usage.sh script every minute, streamlining data collection and regular server usage data collection and reporting.

**Core Java Apps** [GitHub]:

- Twitter CRUD App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- JDBC App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- Grep App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.

**Spring RESTful Microservices App** [GitHub]: Not Started

**Python Data Analytics** [GitHub]: Not Started

**Hadoop** [GitHub]: Not Started

**Spark** [GitHub]: Not Started

**Cloud/DevOps** [GitHub]: Not Started

## Highlighted Projects

**Machine Learning Driven Job Recommender System** [GitHub]: Developed a job recommender system achieving a 90% match rate. Used Python for NLP-based data preprocessing, reducing ML training time by 70%. Implemented a MySQL database for storing resumes and job descriptions. Created a user-friendly web app with Django for backend and React for frontend.

**NBA Data Model and Database:** Designed and implemented a 2021 NBA Season database using SQLite. Utilized ER Diagram for structure, inserted data, and implemented SQL queries. Developed a Java application using JDBC for database interaction. Created an XML version with an XML Schema and performed queries using XSLT.

**Gradient Descent for Univariate Linear Regression:** Implemented Gradient Descent algorithm for predicting final marks based on midterm marks using student data. Compared standardized and non-standardized values, conducted exploratory data analysis, and adjusted learning rates and iterations for improved accuracy. Validation with scikit-learn library showed similar outcomes.

## Professional Experiences

**Software Developer, Jarvis (2023-present):** Developed data engineering and DevOps projects at Jarvis for internal users using Java, Python, Docker, Git, PSQL, and Cloud (GCP). Worked in an agile environment with daily scrum meetings and bi-weekly sprint reviews/retrospectives to enhance development processes.

**Data Science Intern, Ansys (2022):** Developed Python scripts to support the Electronics Business Unit team in improving API analytics engine that processed software usage data, utilizing technologies like PySpark and Azure Databricks. Engineered nested sets tree algorithm, slashing hierarchical user data query time by around 80%.

## Education

**Toronto Metropolitan University (Formerly Ryerson University) (2016-2022),** Bachelor of Engineering, Electrical and Computer Engineering

## Miscellaneous

- IBM Data Science Professional Certificate (2022)
- IBM Applied DevOps Engineering Professional Certificate (2023)
- Basketball
- Strength Training
- MMA
- Cooking/Baking
- Gaming