

John Cao . Jarvis Consulting

I am a recent graduate from York University's Lassonde School of Engineering with a Bachelor's degree in Computer Science. I also hold a Bachelor's degree in Chemical Engineering from the University of Toronto. During my time at York, I have worked as part of the school's IT department where I acted as the main source of support for several business applications. I also spent 16 months working as an intern at Hydro One Telecom where I was able to speed up numerous tasks and processes through building scripts in Python and Bash. Through these various experiences, I was able to demonstrate my problem solving and communication skills. My interest in pursuing a career in software started when I took an Introduction to Programming course during my first undergrad. I was drawn to how programming allowed me to create and build things in a very accessible manner. Just a couple of lines of code and I was able to see the results of my work. Currently I am an Applications and Data Engineer at Jarvis where I have had the opportunity to improve my level of proficiency in various tools and technologies such as Java, Linux, and Docker as well as learning about good software development practices. I am looking forward to bring my skills and knowledge and contribute to your team.

Skills

Proficient: Java, Python, Linux/Bash, RDBMS/SQL (PostgreSQL), Agile/Scrum, Git

Competent: HTML/CSS, Docker, Maven, REST API, Django

Familiar: JavaScript, JUnit, Scikit-learn, Machine Learning, Computer networking

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_JohnCao

Cluster Monitor [GitHub]: Implemented a Linux cluster monitoring solution using bash shell scripts that collect hardware specifications of each Linux server and their resource usage. The data collected is stored in a PostgreSQL database provisioned using Docker which can then be queried to answer business questions.

Core Java Apps [GitHub]:

- **JDBC App:** Programmed an application utilizing the JDBC API to perform CRUD operations on a PostgreSQL database. App functionality was implemented using the DAO design pattern.
- **Grep App:** Developed a Java application that simulates the grep command in Linux. The application takes in a text pattern as user input and searches for it recursively in a given directory. The app is written in Java and uses the Stream API for memory efficiency. Maven was used to build and package the project which is available on DockerHub.

Highlighted Projects

Random Lunch Picker [GitHub]: Developed a web application using Python's Django framework that uses the Yelp Fusion API to randomly suggest a restaurant based on location information and preferred category of food.

Job Applications Tracker [GitHub]: Built a web application using Javascript that allows the user to track job application deadlines and upcoming interview times. Utilizes the Javascript object-oriented database IndexedDB to store data in the browser.

Professional Experiences

Applications and Data Engineer, Jarvis (2021-present): Collaborated with a team using Agile/Scrum methodology to develop various back-end and data projects involving technologies and tools such as Linux, SQL, Java, and Docker. Led numerous Daily Scrum meetings where I helped plan the team's goals and solved roadblocks.

Programmer Assistant, York University Lassonde School of Engineering (2020-Present): Worked with a team within the Engineering department to provide technical support for various business applications to internal clients. Led requirements gathering and walk-through sessions for faculty members and staff. Liaised with university IT team and application vendor to implement Single Sign-On authentication

Second Level Support Intern, Hydro One Telecom (2019-2020): Developed various internal technology tools using Python and Bash to reduce run time of various tasks. Collaborated with senior engineers in resolving network asset management issues. Administered several Ubuntu and Windows servers.

Education

York University (2017-2021), Bachelor of Sciences, Computer Science

University of Toronto (2011-2017), Bachelor of Applied Sciences, Chemical Engineering

Miscellaneous

- Basketball and soccer