# Akshay Sapra - Jarvis Consulting

I am a recent graduate from UBC where I received my mechanical engineering degree with high distinction. Over the last few years, I have self-taught myself computer science concepts throughout university, as my interest switched from mechanical engineering to computers. I have done several projects that have allowed me to expand my knowledge of the development industry. On a more personal note, my parents moved to Canada when I was 4 years old, and I believe that the hardships that come along with being an immigrant have taught me to stay determined and work hard. I have travelled the world and immersed myself with many cultures, and speak 4 different languages, and can recognize almost any variant of the English accent. My hobbies include astronomy, sports, and day trading various instruments. In totality, the data engineering industry excites me as it is an ever-changing sector with new learning opportunities around each corner.

#### Skills

Proficient: Java, Bash, SQL, Agile/Scrum, Python, HTML, CSS, JDBC, C++

Competent: AWS, Android, PHP, Groovy, MATLAB, R, C Familiar: GraphQL, AngularJS, Javascript, Google Cloud

### **Development Projects**

Project source code: https://github.com/jarviscanada/jarvis\_data\_eng\_akshay

- Linux & SQL: Developed The *Linux Cluster Monitoring Agent*, which is an internal tool that monitors cluster resources and saves the collected information into a database for future use. This project involved regex, SQL, RDBMS, and Bash CLI.
- Core Java Apps: Developed three separate apps. Firstly, The Java Twitter App is a command line application that demonstrates the use of Creating, Reading and Deleting Tweets. It connects to Twitter REST API using the authentication tool OAuth 1.0. Post and Get requests were used with the twitter API, and the data was processed using the DAO design pattern. Secondly, The GREP App replicates some of the core features of the Linux GREP command. This app is built in Java. It uses recursion to go through all files in a given directory (even sub directories), and outputs any lines from files matching the input pattern into a temporary folder. This project involved Java I/O, lambda, streams, IntelliJ IDE and how to modularize code into functions. Thirdly, the JDBC Project was used to make a prototype for the fundamentals of JDBC and DAO pattern.
- SpringBoot App: Developed The Springboot Trading App, which is a proof of concept of an online stock trading simulation REST API. Its a MicroService which is implemented with Springboot for internal dependency management, and Maven for external dependency management. The users of this application can get market quotes for stock tickers, details about user data, positions, and security orders, all of which are stored in the Postgres SQL database. All of the data relating to quotes comes from IEX Cloud in real time, and the app is deployed using Docker.
- Cloud & DevOps: Not started
- Hadoop: Not started Spark/Scala: Not started

#### Professional Experiences

Data Engineering Associate @ Jarvis, Toronto (November 2019-Present): Completed core big data technology projects which include cloud, DevOps, Java, Hadoop & spark. Performed the duties of scum master in agile based team projects to ensure team cohesion, collaboration, and overall success.

Software Developer @ ProSmart Enterprises, Kelowna (July 2017-October 2018): Involved in all areas of development from design to feature completion in an Agile team. Developed software using MVC patterns and MySQL, and developed APIs to manage sports content using Python. Lead the projects for third party service integration for newsfeeds, and content filtering. Collaborated in front and backend web development with PHP, Angular, CSS/Sass, HTML5, Javascript.

## Education & Academic Projects

University of British Columbia (2013-2018), Bachelor of Applied Science, Mechanical Engineering

- E-commerce web platform for sports items: Implemented features from scratch such as creating and managing profiles, modifying cart, admin capabilities, user reviews, filtering database items by category or keyword, and inventory counts. Utilized ER & UML modelling, querying using SQL, and web programming with JDBC, HTML, CSS and JSP.
- Autonomous Vehicle system (Capstone project): Worked on an Autonomous Vehicle and Advanced Driver Assistance Systems with a group of 5, and designed high-level decision making algorithms.

## Certificates & Awards & Activities

- Dean's Honour List Designation with 4.0/4.0 GPA (UBC)
- Chancellors scholar (admittance average of 95% to UBC)
- Golden Key International Honour
- Deputy Vice Chancellor's Scholarship
- CN's Diversity Scholarship