

# Aayushi Bhatnagar, Jarvis Consulting Group

I hold a bachelors and masters degree in Computer Applications. My professional experience include working as QA Analyst for Barclays Bank and as Associate Software Developer at FIGmd. I enjoy finding patterns out of data. It is like unlocking puzzles and finding hidden things, except the fact that finding insights and inferential evidence in data actually has effects on business decisions. On a more personal note, I am a people's person. I love meeting new people, traveling and partaking in outdoor workout boot camps. Additionally, I enjoy watching travel vlogs and reading fantasy literatures and autobiographies. Currently I am working as a trainee with Jarvis Consulting and aim to enhance my skills and grow my network as an IT professional.

## Skills

**Proficient:** Java, Bash, SQL, Agile/Scrum, Hadoop, Hive, Python, R, GIT

**Competent:** Springboot, PostgreSQL, MongoDB, Google Cloud

**Familiar:** Python, R, Hive, SQL, Machine Learning, Scikit-learn, Numpy, Pandas, Seaborn, Jupyter Notebook

## Development Projects

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

- **Cluster Monitor:** Developed a Cluster Monitor Agent that monitors cluster hardware resource requests. It records hardware specifications of each node and monitor node resource usages like CPU/Memory usage. The program was implemented using Bash Scripts and PostgreSQL.
- **Core Java Apps:** Implemented a Twitter CLI Application that allows us to post, show and delete Twitter posts using Twitter REST API unlike common web and mobile application. Explored concepts like DAO design patterns, Java JSON library to process JSON files, maven dependencies and MVC architecture.
- **SpringBoot App:** Utilized Spring framework to develop Trading App which is an online stock trading simulation. It implements MVC and Microservice design architecture. The application pulls stock market data from IEXCloud REST API and application data is stored into a PostgreSQL database. Maven is used to build the application and deployed using docker containers. Trading app can be used by anyone developers or traders using web browser via Swagger UI.
- **Hadoop:** Delivered a big data platform that is built utilizing Apache Hadoop and its components like HDFS, MapReduce and YARN. A Hadoop cluster is provisioned on Google Cloud Platform(GCP) with three nodes that are managed by YARN. Apache Hive is used to read and write from HDFS by connecting to HIVE server via CLI(beeline) through SSH or Zeppelin Notebook through browser.
- **Spark/Scala:** Executed business related queries using Resilient Distributed Data (RDD), SparkSQL and Spark's Structured APIs (DataFrames and Datasets). Explored Spark Architecture and its features using Zeppelin notebook.
- **Cloud & DevOps:** Not started

## Professional Experiences

**Software Developer, Jarvis, Toronto (2019-Present):** Developed reliable software applications using Bash, Core Java and Springboot. Used SQL and PostgreSQL to manage application data. Successfully built applications on maven and deployed using docker containers. Tested applications using JUnit and Mockito tests. Used Big Data Technologies like Apache Hadoop and Spark to solve business related queries. Documented all development work in accordance with agreed standards. Worked individually as well as collaborated with peers following Agile team methodologies.

**QA Analyst, Barclays Global Service Centre, India (2018-2019):** Performed test driven and behavioral driven practices within the team, ensuring that unit tests and acceptance tests are implemented to confirm that acceptance criteria are met, executed test cases in accordance with department defined test plans and procedures. Assisted in defect management and corrections for ensuring quality. Developed comprehensive code documentation, assisted with report development, supported quality assurance process, managed testing environments, assisted developers in debugging application issues using tools.

**Associate Software Developer, FIGmd, India (2018-2018):** Designed an interactive walkthrough for an in-house tool using React Library, effectively addressed complex bugs and worked as a part of scrum team and develop accurate work estimates.

## Education & Academic Projects

### University of Toronto (2019-2019), Certification in Foundation of Data Science

- **Analysis of Wine Reviews 2019:** Analyzed a data set of 129,970 wine reviews that was scraped from Wine Enthusiast Magazine. Worked on missing data and duplicate data. Python libraries were used throughout the project for data preparation, analysis and visualization. WORDCLOUD was generated using 'matplotlib' python library to extract an image from set of keywords. Using above analysis and visualization, it was concluded that prices varied greatly and the more you pay, the more likely you are to buy a wine reviewed positively.

### CDAC (2017-2018), Post Graduate Diploma in Big Data Applications

- **Exploratory Analysis and Sales Prediction for BigMart 2018:** Conducted Store and Product level analysis and Data exploration using R. Extracted all important features by comparing hypothesis data and available data. By obtaining the resultant data from above activities, it was possible to predict the sales price over a period of years across various outlets. Using the resultant data, it gave an idea about each product being sold at specific outlets which helped in predicting how much quantity of a particular product is needed to be stocked up at particular outlets.

### Vellore Institute of Technology (2014-2017), Master of Computer Applications

- **Movie recommendation system:** Built a recommendation system that lists best 5 movies to the user on the basis of movie ID and ratings. Cleaned the data received from Kaggle using PIG. Processed the data in HIVE. Found correlation between different movie ratings which was taken as a threshold and accordingly movies were recommended using MapReduce.
- **Service recommendation System 2016:** Illustrated an approach for recommendation system using KASR (Keyword Aware Service Recommendation) Method that uses keywords and gives an appropriate recommendation list to the user on HADOOP framework. It helped users to improve efficiency of recommendation system over conventional recommendation system.

### Arya College of Engineering and IT (2011-2014), Bachelor of Computer Applications

- **Library Management System:** Delivered a software that handles primary housekeeping functions of a library like keeping track of all books and their checkouts, members' subscriptions and their profiles. It also maintains a database for entering new books and recording books that have been borrowed with their respective due dates. Java is used for implementation and SQL for database.

## Certificates & Awards & Activities

- Ranked among top 3 throughout Bachelor of Computer Applications (2011-2014)
- Participated in Micro Tyco. Worked with a team to help raise charity amount for poor entrepreneurs in developing world (2018)