

# Zongpeng Yang . Jarvis Consulting

I recently graduated from Queen's University with a Bachelor's Degree in Applied Science in Engineering Physics. I chose to move halfway across the globe from China to Kingston, Ontario to pursue a career in engineering. During the last year of University, I found my interest in Computer Science which is when I decided to enroll in basic CS courses and eventually found myself pursuing a second degree in computer science. I am passionate about learning new technology software as well as applying new and developed skillsets. Additionally, I also love to partake in competitive video games with friends all over the country. In totality, I am excited to pursue a career in data engineering to further develop my skills and hone in on that which I am passionate about.

## Skills

**Proficient:** Java, Bash, SQL, Agile/Scrum, SpringBoot, Hive, Spark, Maven, AWS, Jenkins, Docker

**Competent:** Kubernetes, HDFS, YARN, Scala, Amazon EKS

**Familiar:** C, C++, Python, HTML, CSS, PHP, Assembly Language

## Development Projects

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

- **Linux & SQL:** Developed three bash scripts and two SQL scripts. Bash scripts will collect hardware usage information on each machine and create a PostgreSQL database docker container on the master node. SQL scripts will initiate the table and there are some sample queries included.
- **Core Java Apps:** Developed three core Java applications. The first one is to simulate the Linux grep command using Java. The second part is to get familiar with JDBC. The last part creates a twitter CLI which can post, see, or delete a tweet by consuming Twitter REST API.
- **SpringBoot App:** Developed a stock trading simulation REST API app using SpringBoot. The application is able to store the account information of a trader into a PostgreSQL database. It also enables traders to sell/buy a stock and withdraw/deposit fund into his/her account.
- **Cloud & DevOps:** Provisioned the stock tracking simulation Springboot application using AWS services, such as EC2, ALB, Autoscaling, docker, etc. The application is scalable, fault-tolerant, and elastic. Built a CI/CD pipeline with AWS Elastic Beanstalk and Jenkins.
- **Hadoop:** Wrote a Zeppelin notebook using Hive SQL. Optimized Hive SQL's efficiency using partition and columnar file format. Compared time difference when doing the same query on tables with different optimization.
- **Spark/Scala:** Developed a Scala worksheet testing scala data structures. Constructed one Zeppelin notebook for RDD and one for Dataframe/Dataset and SQL. Tested performance difference between RDD and Datafram/Dataset/SQL.

## Professional Experiences

**Associate Data Engineer, Jarvis, Toronto, 2019-Present:** Acquired the technical skills required for a Junior data engineer. Developed team management and time management skills. Adapted to an agile working environment and agile software development. Worked on projects that include Cloud, DevOps, Java, Hadoop/Spark, and gained the ability to leverage core big data technologies. Accounted for the team as a scrum master to ensure the success of our team project by fulfilling project requirements and team cohesion.

## Education & Academic Projects

Queen's University (2014-2019), Bachelor's Degree of Applied Science, Engineering Physics

- **Rubik's Cubes Solver:** Developed task assignment and distribution skills. Developed team communication skills. Built on leadership skills while completing the project.
- **Differential Equation Solver:** Implemented a mathematical solution into the program using Matlab. Solved linear differential equations using the designed algorithm.

## Activities

- Classic Music Generator (2017) - Generated a random music based on the rule provided