

# Brian Kim . Jarvis Consulting

Some words that could describe me are ‘persistent’, ‘critical thinking’ and ‘teamwork’. I’m a proficient Java developer and have developed Java/Kotlin applications that utilize SQL Database and Web Services following the software development lifecycle. I am a recent graduate from York University with a Bachelor of Computer Science. Not only I graduated with a deep understanding of CS fundamentals and programming skills, but I was also involved and acted as a staff of a student club called ‘Youth With A Mission’ which strengthened my ability to work in a team setting. Furthermore, I enhanced my coding skills and critical thinking through different programming contests and hackathons. I have a great passion for immersing deep into the software industry because it is so ever-changing. Learning new technologies and applying them excites me as a software developer because it solidifies my skillset and helps me grow along with the industry without falling behind.

## Skills

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

**Competent:** HTML/CSS/PHP, Python, Swift, Kotlin, JavaScript

**Familiar:** Firebase, Model-View-ViewController, C, Objective-C, Visual Basic

## Jarvis Projects

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

**Cluster Monitor** [GitHub]: Implemented an automating monitor agent which observes a cluster of Linux nodes/servers and records data from the nodes. The users are clusters of Linux servers internally connected by a switch that communicates through internal IPv4 addresses. This monitoring agent will capture the hardware specifications of each node through bash scripts and periodically insert node resource usage into a PostgreSQL RDBMS database that is containerized and ran in docker. Applying this monitoring agent and the data it collects, you can effectively solve important business problems involving resource planning such as increasing and decreasing the number of nodes depending on the servers’ relative CPU/Memory usages. GitFlow is used as the branching model.

**Core Java Apps** [GitHub]:

- **Twitter App:** Designed and developed a Java App that allows users to post/show/delete a Twitter post using Twitter REST API. This app implements the MVC and DAO pattern to access Twitter REST API. A HttpClient will create a POST/GET/DELETE request, signed with the OAuth 1.0 authorization method, and send it to the Twitter server and get the response back in JSON, which is then parsed into a meaningful result for the users. Maven is used to manage project lifecycle and dependencies. The Spring framework is used to manage the dependency injection of the components. It is tested with Mockito, JUnit 4, and finally deployed by dockerizing it into an image and pushing it to the Docker Registry.
- **JDBC App:** Developed a JDBC App that creates a connection to an PostgreSQL database which stores sales information using the JDBC driver. It utilizes the connection pooling to simplify JDBC flow and Data Access Object (DAO) Pattern to abstract the data persistence and the underlying queries. CustomerDAO and OrdersDAO are implemented to perform CRUD operations against the tables in the database system.
- **Grep App:** Developed a Java Grep App on IntelliJ that implements the Linux grep string pattern searching utility that matches a regular expression. This app recursively searches a given directory using BufferedReader for lines that match the specified regular expression. When the matched lines are found with Pattern Matcher, they are written out to a file by a BufferedWriter. Exceptions and errors are handled by SLF4J framework, packaged with Maven, and containerized with Docker for easy access.

**Springboot App** [GitHub]: Designed and developed a three-tier architecture application that utilizes SpringBoot to provide a stock trading app. This application is a RESTful API and can be consumed by various clients such as Web/Mobile applications. HTTP endpoints are used to help manage trader profiles, accounts, and trade securities. Integration tests were run against each layer and REST APIs were tested via Swagger-UI, Postman, and the application was dockerized and deployed on the Docker hub.

**Python Data Analytics** [GitHub]: Developed and analyzed big data set from an external market vendor to perform data wrangling and generate new insights about the market. With the transaction data pulled and dumped into a PostgreSQL data warehouse. From the data in the data warehouse, using Python NumPy and Pandas, the data is analyzed on Jupyter Notebook and the results are visualized using Matplotlib.

**Hadoop** [GitHub]: Not Started

**Spark** [GitHub]: Not Started

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

## Highlighted Projects

**Remindoo (Play Store App)** [GitHub]: Built and published an Android app in Kotlin that reminds people who work/study from home to drink water, stretch, and move around to build healthier work/study habits during COVID-19. Utilized Android Services (AlarmManager) to implement background running timer and send Broadcasts to BroadcastReceiver that handle timer expire events. Utilized NotificationManger and NotificationBuilder to send custom Notifications to users upon termination, using PendingIntent to navigate users back into the app. Utilized ViewBinding and PreferenceManager to modify and persist user preferences in the app. Implemented third-party libraries such as CircularMaterialProgressBar for a modern UI look.

## Professional Experiences

**Software Developer, Jarvis (2021-present)**: Designed, developed, and tested many applications while following the Software Development Life Cycle. Communicated in a team through Agile practices such as Daily Scrum, Sprint Retro, and Sprint Planning. Maintained source code version control through Git/GitHub, using GitFlow as a branching model.

## Education

**York University (2013-2020)**, Bachelor of Arts, Computer Science, Lassonde School of Engineering - Member of Dean's Honour Roll (2017)

## ## Miscellaneous

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- Guitar
- Rock Climbing