Tina Lee . Jarvis Consulting

I am a new graduate from the University of Toronto with a Bachelor's degree specializing in Bioinformatics. During my university years, I had opportunities to work with professional teams as a research student to build a solid programming foundation and explore my interest in data analysis. Besides, I am also a team player and an effective communicator, who is always responsible and well-organized. Currently, I am working at Jarvis to improve my skill sets as a data engineer while building challenging projects and applications using new technologies such as Docker, Springboot, Java, Maven, REST API, RDBMS, etc. I would say I am a problem-solver by nature and I am ready to solve challenging problems in our daily lives in the data engineer industry.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, SQL, IntelliJ, Maven

Competent: Docker, JUnit/Mockito, REST API, Spring Boot, MVC architecture

Familiar: Javascript, React Native, R, Python, Express.js

Jarvis Projects

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

Cluster Monitor [GitHub]: Implemented a Cluster Monitoring Agent that aids Jarvis Linux Cluster Administration (LCA) team in future resource planning. This project is implemented using bash shell scripts to automatically collect hardware specification data and resource usage data of each server. Data will be collected and stored to a Postgres SQL generated by Docker every one-minute using crontab.

Core Java Apps [GitHub]:

- Twitter App: Designed a Twitter application with MVC architecture that allows users to perform CRUD functionalities via REST API. Programmed using Twitter API, HTTP client, OAuth authorization, and JSON serialization libraries. During development, JUnit is used to perform integration tests on all java files, and Mockito framework is used to test classes with dependency utilizing the ability to mock the dependency.
- JDBC App: Implemented a simple application that sets up a connection between a Java application and RDBMS for data accessing. The CRUD functionalities are implemented using DAO design patterns.
- Grep App: Developed a Java application that mimics the grep command line function. The app recursively searches for a matched pattern given a root directory and outputs matched lines to an output file. Used Lambda and Stream API to list and filter files under the root directory and reduce memory usage.

Springboot App [GitHub]: Designed and developed a REST API that allows users to buy or sell securities, manage their profile, and deposit and withdraws funds from their accounts. The application fetches the latest market data from IEX Cloud and stores this information along with trader information in the PostgreSQL database using Java 8, Springboot, microservice, MVC architecture. For testing, integration tests are implemented using JUnit 4 with coverage of more than 60 percent. Later, the application is dockerized using base images postgres and alpine.

Python Data Analytics [GitHub]: Performed data analytics against London Gift Shop (LGS) historical data stored in a PostgreSQL database to help LGS marketing team to come up with new marketing strategies to increase its revenue. Analytics is done in Jupyter Notebook using several Python libraries such as Pandas, NumPy, Matplotlib, etc.

Hadoop [GitHub]: Not Started

Spark [GitHub]: Not Started

Cloud/DevOps [GitHub]: Not Started

Highlighted Projects

Fantasy Alert [GitHub]: An IOS app that allows users to get live updates on NBA players status during live games. Web scraping was performed to fetch data of all NBA teams, the players belonging to each team, and most importantly the live data updates. All users are allowed to customize their list of players that they want to follow. This project is implemented using React Native.js and Express.js as the backend.

Pfam Data Annotation of Human genes [GitHub]: A project that demonstrates the workflow to download Pfam families data from the Pfam database, how to map HGNC symbols to Pfam domains, how to annotate the example gene

set, and provides examples of computing database statistics. This package serves dual duty, as a Rstudio project, as well as an R package that can be installed.

Professional Experiences

Software Developer, Jarvis (2020-present): Worked as a Data Engineer and developed projects using technologies, such as Java, Docker, Maven, Springboot, RDBMS, REST API. Collaborated with team members in daily scrum meetings, sprint meetings, and code review sessions with senior developers to get involved in Agile/Scrum practice.

Research Student, University of Toronto (2019): Proposed and successfully implemented a tool for processing and analyzing the output of a DNA aligner and summarizing the output by creating a splicing graph to visual patterns. Designed a user-friendly interface application using R and Shiny and performed data analysis using R.

Education

University of Toronto (2015-2020), Bachelor of Sciences, Bioinformatics and Computational Biology

Miscellaneous

- Business IT certificate (2021)
- Badminton player
- Snowboarding