Steven Liu . Jarvis Consulting

Problem solver, culture explorer, lifelong learner. I'm a Jarvis data engineer associate graduated from the University of Saskatchewan with an Honors B.Sc. degree in Computer Science and Statistics. The blend of academic training has given me the knowledge of both solid coding and analytical background. I'm ready to kickstart my career in data engineering, which includes all the exciting things I am passionate about. I look forward to opportunities to utilize and develop my skills from Jarvis' clients in Toronto.

Skills

Proficient: Java (Spring, JPA/Hibernate), C++, R, Bash, SQL, Agile/Scrum, Statistics

Competent: Python, Node.js, Docker, Cloud Computing, Machine learning (Scikit-learn, Keras)

Familiar: Angular, Kubernetes, Spark, Scala, DevOps (Jenkins, Travis CI)

Development Projects

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

- **Cluster Monitor**: Followed the software development practices including Agile and Gitflow, I developed an internal tool for cluster administration team to automate database server provision and server usage monitoring. I also wrote clear documentation on architecture design and scripts usage.
- **Core Java Apps**: Developed three Java applications: Grep App, JDBC Demo, and Twitter CLI App. Maven is used as the project configuration & building tool and JUnit4 and Mockito for unit & integration testing. I got familiar with many key concepts in web development such as HTTP, JSON, MVC, and Spring framework in this project.
- **SpringBoot App**: **In-progress** Developing a trading system with Spring MVC and Hibernate.
- **Cloud & DevOps**: Not started
- **Hadoop**: Not started
- **Spark/Scala**: Not started

Professional Experiences

Data Engineer Associate, Jarvis, Toronto (2020-Present): I'm working on projects using core big data technologies including Cloud, DevOps, Java, Hadoop and Spark. As a team member, I'm responsible for performing the duties of Scrum master in Agile-based team projects to clear obstacles, ensure team cohesion, address collaborative dynamics, and facilitate goal management.

Software Developer, University of Saskatchewan, Saskatoon (2019-2020): Developed R package HTLR for high-dimensional data analysis. In particular, I refactored the legacy C modules with C++ and OOP design. The core Markov chain Monte Carlo algorithm has been optimized to get improved by 30% in speed. I also wrote the package documentation and the user manual.

Data Scientist, Social Sciences Research Laboratories (SSRL), Saskatoon (2018-2019): Collected data from Twitter REST API and performed data cleaning transformation; Performed data mining tasks including bot detection, sentiment analysis, emotion extraction, topic modelling, and social network analysis on 100,000+ tweets and 50,000 users; Produced analysis summary (work samples), reported to the project director.

Education & Academic Projects

University of Saskatchewan (2014-2019), *Bachelor of Science (Honours), Computer Science & Statistics*

- **Research on Algorithms for High-dimensional Data Analysis** Performed literature review on algorithms for high-dimensional classification and feature selection; Conducted large-scale simulation studies to access the performance of several state-of-the-art packages; Composed technical report as undergraduate honours thesis.
- **Image Processing Project** Implemented a variety of algorithms for image manipulation, segmentation, and classification with Scikit-image, Scikit-learn, and Keras; Created documents combining the code and graphical results with Jupyter Notebook.

- **Sociolinguistics Project** Analyzed the interview data using Excel (t-test, rank correlation, anova) to study the factors influencing heritage language performance of Chinese immigrant children in Saskatchewan; Provided model suggestions and result interpretation to researchers without quantitative background.

Certificates & Awards & Activities

- Amazon Web Services (AWS) Certified Cloud Practitioner - 2020
- Academic exchange to Hong Kong Baptist University (HKBU) - 2017
- Japanese-Language Proficiency Test N2-Passed - 2017