Andrew Chew . Jarvis Consulting

I am a recent graduate from the University of Toronto (CS) with a background in software development and data analytics. I am highly adaptive to new environments and always looking for opportunities to enhance my capabilities. Currently, I am working as a Junior Software and Data Engineer at Jarvis where I work with my team in an agile environment to deliver high-quality software products. During my university education, I was able to develop crucial leadership and teamworking skills through numerous development projects. I also have experience organizing and leading projects through my work as an events coordinator at Hope United Church. My five years of experience at Loblaws has also taught me important communication skills that are necessary when working in a diverse environment as well as in conflict resolution situations. I am excited to leverage my capabilities to pursue my two biggest passions in software and data engineering, utilizing big data in designing products that make the world a better and infinitely more interesting place.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git/GitHub/GitFlow, R/R Markdown

Competent: Python/pandas/NumPy, Docker, Maven, JDBC, JUnit 4, LaTeX

Familiar: Cloud, VNC, Log4j/Slf4j, JavaFX, C, Verilog

Jarvis Projects

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

Linux Cluster Monitoring Agent [GitHub]: Developed a Linux Cluster Monitoring Agent allowing users to obtain server hardware and usage statistics in real time. Provisioned a PostgreSQL instance using a Docker container to persist data and designed a bash agent to be installed on servers to collect and insert data into the database every minute using crontab. Performed data analytics using SQL to facilitate users generating business reports. Collaborated with the development team using the Agile workflow.

Core Java Apps [GitHub]:

- Twitter App: Not Started
- JDBC App: Developed a Java Maven project to implement DAO patterns to CRUD to and from a PostgreSQL database provisioned using Docker. Leveraged JDBC to setup connections between the app and the RDBMS.
- Grep App: Developed a Java Maven project to perform regex pattern matching on files in a given directory recursively. Leveraged new Java 8 features including the Stream API and Lambda expressions to implement the same functionality with improved performance. Utilized the log4j and slf4j packages to log error messages.

Springboot App [GitHub]: Not Started

Python Data Analytics [GitHub]: Not Started

Hadoop [GitHub]: Not Started

Spark [GitHub]: Not Started

Cloud/DevOps [GitHub]: Not Started

Highlighted Projects

Sokoban, Othello, and Tenner Grid AI Solver: Applied key concepts in AI to develop solvers for three games using python attaining a final grade of 94. Strategized and developed heuristics to improve runtime performance of solvers by over 75%.

Data Visualization Project on Climate Change [GitHub]: Managed a team of three to identify and analyze four large datasets, investigating the relationship between emissions and methods of transportation. Led tutorial sessions introducing RStudio and Version Control via GitHub integration to facilitate collaboration between team members. Designed three interactive data visualizations using psychological principles to effectively present and communicate key findings. Rapidly learned and applied the Shiny R package within a week to deliver infographic publicly by deploying a Shiny App online.

Cross-Stitch Image Processing Project: Developed an R program to produce a cross-stitch pattern from an image using k-means clustering attaining a final grade of 88. Compiled a self-contained non-technical pdf document using Rmd demonstrating the process of the program and how to use it.

Twitter Sentiment during COVID-19 Project: Scraped over four million tweets to build a dataset to analyze consumer sentiment during the pandemic in a team of four. Performed data analysis to identify new terms relating to the pandemic and how they relate to consumer sentiment using machine learning techniques in python.

Restaurant POS System Project: Managed a team of three to fully develop a restaurant point of sale system in java utilizing fundamental OOP concepts. Built a fully functioning GUI using JavaFX. Effectively identified and fixed core issues in the code base using vigorous unit testing to improve user experience.

Professional Experiences

Junior Software & Data Engineer, Jarvis Consulting Group (2021-present): Develop software using the SDLC process in an agile work environment, delivering high-quality products. Spearheaded daily scrum meetings as team lead for a sprint.

Produce Clerk Part-Time, Loblaw Companies Limited (2016-present): Advise customers on over 400 products leading to improved customer satisfaction. Effectively handle conflict resolution in a sensitive and professional manner, ensuring safety in the workplace. Train new employees for day-to-day operations. Successfully completed diversity training.

Events Coordinator, Hope United Church (2012-2016): Managed a team of three to organize after-school activities for ten children. Strategized learning sessions for grade school children in Mathematics and Science. Taught children basic piano skills.

Education

University of Toronto (2017-2021), Honours Bachelor of Science, Actuarial Science, Statistics, and Computer Science - President's Entrance Scholarship - Samuel Eckler Memorial Scholarship in Actuarial Science - GPA: 3.31/4.0

Miscellaneous

- Coursera Data Scientist Toolbox (2020)
- Coursera R Programming (2020)
- Concert Pianist - Performed at four concert recitals
- Kayaking Club - Participated in sprint racing
- UC Dragonboat Club - Participated in club activities in first year of university
- Shorinji Kan Jiu Jitsu Club - Participated in club activities in first and second year of university including a tournament bout in Kingston
- Ultimate Frisbee Player - Organized game sessions with friends
- Nature Enthusiast - Hiked the Rockies