Abdullah Riaz . Jarvis Consulting

I earned a Bachelor's in Electrical Engineering from Ryerson University. The coursework had allowed me to develop my understanding of key concepts in software that are fundamental, such as object-oriented programming, data structures and algorithms. From the numerous projects and assignments that I have done, I was able to develop and solidify these concepts alongside grow my communication skills by working in a teamwork environment. After working for an engineering consulting firm, I joined Jarvis as a Data Engineer, looking to apply my data engineering and software knowledge and experience as well as improve on date engineering/software development concepts and learn new concepts and technologies that are used today. At Jarvis, I applied my software fundamentals to projects while working with others in an Agile/Scrum environment. Working in a software role fulfils a passion. A passion to work in a software environment while collaborating with others to achieve a common goal. This passion stems from my curiosity about how things worked, always wanting to understand the underlying mechanics that result in something meaningful.

Skills

Proficient: Java, Python, Linux/Bash, RDBMS/PostgreSQL, Agile/Scrum, Git

Competent: Docker, Jupyter Notebook, RDBMS/IBM DB2, GitFlow, GitHub

Familiar: MongoDB, Cassandra, Apache Hadoop, Apache Spark, Google Cloud Platform/GCP, Amazon Web Services/AWS

Jarvis Projects

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

Cluster Monitor [GitHub]: Developed a monitoring agent tool that allows the user to track host hardware specifications data and host resource usage data per node/server in a cluster of computers. The tool is used by Jarvis Linux Cluster Administration to enable them to monitor and manage their Linux cluster where they can make business decisions based on the data provided. The tool was implemented using Bash scripts to automate key processes, for example starting up a Docker container running PostgreSQL, creating 'host_info' and 'host_usage' tables to store data, etc. To track host resource usage data in real-time, 'crontab' was used to execute the 'host_usage' script in every one-minute increment. Some of the data recorded include CPU number, CPU architecture, memory-free, etc. The data is stored on a PostgreSQL database which then can be analyzed to answer business questions. SQL queries were written to answer these questions by providing average usage data over a specified time interval per node in the cluster and detecting host failures. The tool was tested by creating a minimum vialable product on a single node by running bash script tests and queries test. A PostgreSQL instance was provisioned by running a Docker container. Git was used to provide version control of the code and then uploaded to a remote repository on GitHub.

Core Java Apps [GitHub]:

- Twitter App:
- JDBC App:
- Grep App:

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

Data Extraction: Exchange rate data of over 100 countries were extracted through an API call and stored the data into a CSV file. A large dataset of market capitalization data of over 50 banks was extracted from a webpage through a web scraping process and stored into a JSON file. An ETL pipeline (Extract, Transform and Load process) was implemented on Jupyter Notebook using Python to extract bank and market capitalization data from data files, transformed the market cap currency from USD to GBP using exchange rate data and loaded the transformed data into a CSV file, while logging each part of the ETL process into a separate logging file.

Data Modelling: Modelled a data set for improved operational efficiency on an RDBMS platform on Cloud. The data was reviewed in several different systems and modelled on a relational database on cloud-based PostgreSQL (RDBMS) by utilizing the pgAdmin framework. Modelled a schema of a data set on a relational database by creating an entity-relationship diagram (ERD) that generated table database objects. The data was imported into a relational database by running an SQL script through a script file. Views database objects were created according to the client's requirements and the data was stored as a CSV file. The data was exported into other cloud-based relational database management systems (RDBMS), namely IBM Db2 on cloud and MySQL on a cloud through the phpMyAdmin framework.

Professional Experiences

Data Engineer, Jarvis (2021-present): Worked in an Agile/Scrum environment to work on projects using Java and Linux/Bash with a team of Data Engineers. Worked as part of a team to design, implement, test and deploy features on a product. Daily scrum meetings were held to discuss issues and to set goals for the day. Weekly code reviews were done by senior developers to ensure code works as expected and to meet standards. Worked on features via tickets and uploaded code to GitHub for version control. To manage branches and features, the GitFlow methodology was followed on all projects.

Electrical Designer, Spectra Engineering (2019-2020): Prepared engineering reports, design briefs, equipment sizing including lighting, distribution equipment UPS, generators,and fire alarms for electrical building design. Engineered electrical system design for buildings in accordance with OBC, OESC, ASHRAE, IES and other relevant Codes and Standards, ensured energy efficiency. Coordinated with other disciplines such as Mechanical and Architectural to develop accurate working drawings with AutoCAD. Developed electrical system schematics/riser diagrams. Simulated and analyzed three-phase faults on ETAP software to determine best settings for system's protective devices such as circuit breakers and fuses.

Education

Ryerson University (2013-2018), Bachelor of Engineering, Electrical Engineering

Miscellaneous

- Coursera - Data Engineering Professional Certificate by IBM
- Working out
- Gaming with friends
- Reading