Namitra Kalicharran . Jarvis Consulting

My name is Namitra Kalicharran. I am a Software and Data Engineer at Jarvis Consulting who studied at the University of Waterloo, where I majored in Science while acquiring minors in Bioinformatics and Computer Science. I have a strong passion for developing novel data infrastructures, as demonstrated by my previous experience developing a variety of data pipelines for research labs in both Canada and the US during my undergrad. I am currently working at Jarvis to expand my skills in Software and Data Engineering while working on exciting projects using technologies such as Docker, Java, and Springboot within fast-paced agile environments. I am eager, driven, results-oriented; lastly, I'm passionate about continuous learning and hope to impact your team.

Skills

Proficient: Java, Linux/Bash, Python, PyTorch, Pandas, Numpy, JavaScript, RDBMS/SQL, Agile/Scrum, Git

Competent: PySpark, Docker, TensorFlow, MongoDB, Scikit-Learn, Flask, FastAPI, NodeJS, ExpressJS, React

Familiar: Google Cloud, Amazon Web Services, Django, Kafka, Vue

Jarvis Projects

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

Linux Cluster Resource Monitoring App [GitHub]: Implemented cluster monitoring program for the Linux Cluster Administration team which was developed in Bash and tested on CentOS 7 virtual machines. All the scripts were automated using crontab and the data was stored in a Docker containerized PostgresQL database which could later be queried for further data analytics.

Core Java Projects [GitHub]:

- JDBC App: Designed a Java Grep App made to replicate the Linux grep command, searching files in a directory and matching strings to within the files. There are two different implementations, one using BufferedReader one using Java's Stream API. This project incorporates Maven, Streams, Regex and Lambda Functions and is unit tested using JUnit. Lastly, the application containerized using Docker.
- Grep App: Developed a Java Database Connectivity (JDBC) application that connects to a Docker containerized PostgreSQL database. This application allows users to perform CRUD operations (create, read, update, delete) onto a database. Implemented using Java, PostgreSQL, Docker and Maven.
- Twitter App: Developed a Twitter CLI application that allows users to manipulate their Twitter feed by performing CRD operations (create, read, delete). The application achieves this by submitting and parsing requests from the Official Twitter REST API. It is implemented using Java, Spring, Docker, and Maven and tested using JUnit and Mockito.

Highlighted Projects

Cowculator [GitHub]: Developed a diet tracking progressive web app, using React, MongoDB and FastAPI, that helps users count the carbon footprint of each meal that they have eaten. The progressive web app was deployed on AWS Lamda and won best pitch at ClimateHack!

Stock Price Prediction [GitHub]: Designed and trained a Recurrent Neural Network in Keras to perform Supervised Regression to predict stock prices using technical indicators. Engineered data using Pandas and Numpy to calculate various technical indicators. Created train and testing splits to locally test model performance using scikit-learn.

Professional Experiences

Data Engineer, Jarvis (2021-present): Collaborated in SCRUM teams across many teams at Jarvis. Developed cluster monitoring software for the Linux Cluster Admin team by creating bash scripts that were scheduled in crontab to send data to containerized Postgres database. Leading a SCRUM team of 3 other data engineers to work on JDBC connection and a custom grep app to be integrated into a trading platform.

Data Science Intern, Harvard University (2019): Implemented data pipeline in Spark for processing drug data. Workflow scheduling was managed using Luigi and the pipeline was tested against a subset of the dataset on a SLURM cluster. The pipeline was deployed on Harvard's HPC SLURM cluster. Pipeline resulted in 10x efficiency boost in processing.

Education

University of Waterloo (2016-2020), Honours Science, Faculty of Science - Bioinformatics Minor - Computer Science Minor - Honour Roll: - GPA: 3.7

Miscellaneous

- Kendo player
- Coffee Brewing Enthusiast