Varun Kumar Vats . Jarvis Consulting

I am a graduate student from University of Windsor specializing in IOT and Machine Learning implementations. During my course of studies, I published a couple of conference papers in IEEE focusing on implementation and use cases in the healthcare industry alonside working on my thesis. The thesis focuses on reducing the average time spent in queue by patients.The work of research instigated the mentality of effectively understanding the problem to debug it in correct way possible.Currently, I am working with Jarvis to gain and expand my skills by working on various projects in different programming languages such as Linux, SQL, Java, and Python in an agile environment.

Skills

Proficient: Java, Linux, RDBMS/SQL, Agile/Scrum, Git

Competent: Python, Data Analytics, Data Warehousing, Tableau, Power BI

Familiar: Apache Spark, Apache Kafka, Scala, Hadoop, C++

Jarvis Projects

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

Cluster Monitor [GitHub]: Linux Cluster Monitoring Agent(LCMA) is used to monitor and collect data of various hosts machines connected via network.The data collected consists of hardware specifications and system performance and is further stored in Postgres SQL Database which is an RDBMS using Docker Containers. Bash scripts are used in this project for intialising PSQL container using Docker,and monitoring the hardware specifications and system performance data. This project also uses crontab to collect and generate real-time data and provide statistics for resource utilisation.Finally, the monitoring agent sends data to a database for storage and further analysis.

Core Java Apps [GitHub]:

- Twitter App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- JDBC App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- Grep App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.

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

Machine Learning for C-Section Analysis: This project focuses on performing predictive analytics for determining sucess or failure of C- Section based on current medical condition such as blood pressure, heart rate, and respiration rate. The data is further processed and modelled using Unsupervised Machine Learning algorithms.

Machine Learning for Liver Disease Prediction: This project focuses on performing a comparative analysis of Liver Disease Prediction based on content of enzymes found in the body. The data is further cleaned and organized using standard data mining algorithms using Python standard Libraries. Finally, data modelling is performed and further comparison is done to determine the appropriate method for a particular Liver Disease Dataset.

Professional Experiences

Data Engineer, Jarvis (2021-present): Collaborating with an agile team following Scrum and Sprint principles. Developing applications using wide range of technologies ranging from Bash Scripting, Java, Python, Spark, Scala, to Linux inside dockerized environment.

Graduate and Research Assistant, University of Windsor (2017-2019): This project focuses on performing a comparative analysis of Liver Disease Prediction based on content of enzymes found in the body. The data is further cleaned and organized using standard data mining algorithms using Python standard Libraries. Finally, data modelling is performed and further comparison is done to determine the appropriate method for a particular Liver Disease Dataset.

Education

University of Windsor (2017-2019), Masters of Applied Sciences, Electrical and Computer Engineering - Golden Award - University of Windsor (2019) - GPA: 3.8/4.0

APJAKTU (2017-2019), Bachelor of Technology, Electronics and Comminication Engineering - Gold Award - Faculty of Engineering - GPA: 4.0/5.0

Miscellaneous

- Spark and Python for Big Data with Pyspark(Udemy)
- Chair, Young Professionals(IEEE)
- Chair, IEEE: Organized serveral technical and non technical events
- Gudje, MasseyHacks:Coding Hackathorn for school students