Sowon Ham . Jarvis Consulting

I am a recent graduate of University of Toronto - St. George Campus and I studied statistics and mathematics in my degree. Due to my passion in the DA/BA/BSA field I pursued to a profession that suits my strength and my likings. Jarvis Consulting Group is the first place that I was able to thoroughly communicate with and resulted in a very positive manner to work here as one of the employee.

It is such an honor to be working in a field that is continuously growing every day and see everyone including myself studying new subjects every day. Particularly, while I was studying in my field the process of gathering data, building statistical models, and analyzing through mathematical methods fascinated me to a great extent. I wish to pursue in this field to continuously learn and apply old and new methods of data analysis to play with data.

Skills

Proficient: R/RMarkdown/LaTeX, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git/GitFlow, AutoIt, Docker, Statistics (A/B Testing, Hypothesis Testing, Time Series Analysis), Experimental Design

Competent: Stochastic Processes, Microsoft Excel, Java, Julia, Python, Forecasting, Tidyverse

Familiar: Virtual Network Computing (VNC), Verilog, Machine Learning (Neural Network, Cluster Algorithms), Forecasting, Cloud Networking

Jarvis Projects

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

Cluster Monitor [GitHub]:

- Provided the Jarvis Linux Cluster Administration (LCA) team with a Minimum Viable Product (MVP) for recording the hardware specifications and resource usage for nodes."
- Developed bash scripts for automatically collecting the hardware specifications and resource usage from nodes and record it in a RDBMS, PostgreSQL.
- Used docker to create a container for PostgreSQL to create/start/stop the database.
- Queried the database to perform and collect specific data for related business questions of interest.
- Utilized CRONTAB to automatically data every 1 minute interval from all the servers.

Python Data Analytics [GitHub]: In Progress

Hadoop [GitHub]: Not Started

Spark [GitHub]: Not Started

Highlighted Projects

Computer Automation: - Implemented a complex and lengthy set of instruction for the computer to perform using Windows API as a base to diminish labour. - Researched and incorporated image and pixel searching tools to precisely determine which stage of instructions the computer is performing to reduce automation time by 30%. - Constructed separate executable for different stages of the automation to cut down the testing time and cost by a significant amount.

Data Analysis on Computer Automation: This project based on the computer automation that I performed on the above project. - Designed and performed a replicated exponential factorial experiment to abolish the ambiguity and precisely determine the efficiency of two contrasting scripts. - Enhanced the computer automation efficiency by 10% through utilizing the statistical conclusions written from the experiment.

Non-linear Regression Model with a Neural Network: - Implemented a fully-connected neural network (multi-layer perceptron) with 10-dimensional hidden layer with a trigonometric non-linearity. - Performed gradient-descent using automatic differentiation to estimate parameters given the batch-size, model variance and learning rate. - Adjusted and improved the neural network to learn both the mean and variance of the Gaussian model.

Professional Experiences

Data Analyst Consultant, Jarvis Consulting Group (2021.12-Present): - Provided the Jarvis LCA team with a MVP that collects hardware specification and resource usage on nodes using Bash scripting and store the data into a

RDBMS, PostgreSQL. - Query the database several times to answer business related questions and observe the data. - Collaborated with teams to solve problems that were rather not trivial.

Volunteer Work, St. Paschal Baylon Church (2016.05-2016.09): - Enthusiastic to learn new methods to quickly incorporate it into the working environment. - Immensely communicated with other crew members to work efficiently and not overlap cleaning the same areas. - Flexible with abrupt changes in work schedule to accommodate and prepare for any uprising matters.

Education

University of Toronto - St. George Campus (2017-2021), Honours Bachelor of Science, with Distinction, Statistics and Mathematics

Miscellaneous

- Badminton Player
- PC Gaming
- Build automation scripts for convenience