Luan Nguyen

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Technical Skills

Languages: Python, C++, SQL, R, Java, HTML/CSS, JavaScript
Developer Tools & Frameworks: Git, Docker, Jupyter, Tableau, Power BI, Django, REST API
Libraries: NumPy, TensorFlow, Scikit-learn, Keras, Tidyverse
Database Tools: MS SQL Server, Azure Data Studio, Oracle Database, PostgreSQL, MySQL, MongoDB

Experience

Data Analyst Co-op | *Python, MS SQL Server, Denodo, Tableau, Excel* Jan. 2024 – May. 2024
Vancouver Coastal Healths, Medical Quality Leadership and Practice Dept. *Vancouver, BC*

- Designed, implemented, and automated data pipeline using the **pyodbc** library to connect with data servers like **MS SQL Server** and **Denodo**, facilitating efficient updating and cleaning of data, which was then seamlessly transferred to Excel and **Tableau** for business use; resulting in a 40% enhancement in data accessibility and validation efficiency across 5 physician quality improvement projects
- Conducted data wrangling and manipulation using **pandas** and **MS SQL Server** across diverse quality improvement initiatives, ensuring data integrity and reliability for informed decision-making
- Automated operational workflows through **Python** and **Tableau API**, streamlining the retrieval, encryption, and distribution of physician quarterly performance reports; resulting in a 50% acceleration of the report cycle for for 500 physicians from 4 departments
- Created dynamic and insightful data visualizations using **Tableau** and **Matplotlib** library, illustrating team-based performance metrics to facilitate clear insights and support strategic decision-making initiatives

Highlighted Projects

Data Engine Pipeline | *Docker, PostgreSQL, dbt, Airflow, Git* | Source Dec. 2023 – Current

- Created a robust data pipeline from scratch for **PostgreSQL** databases, utilizing Python's 'subprocess' module for shell command execution
- Implemented secure authentication by setting environment variables for **PostgreSQL** user credentials, enhancing data handling integrity without manual intervention
- Demonstrated proficiency in **SQL** optimization techniques, including **Common Table Expressions (CTEs)** and dynamic SQL generation with **Jinja** templating and macros in **dbt**, ensuring efficient data transformations and maintainable code
- Incorportated distributed computing structures - **Airflow**, emphasizing scalability, reliability, and resource allocation for optimized workflow management

Probabilistic Models | *TensorFlow, Probabilistic Model, Git* | Source Aug. 2023 – Current

- Performed data visualization and ANOVA with hypothesis to identify potential trends, patterns, and significant features within the dataset
- Employed **Python** to conduct **classification models** on dataset comprising 19,000 entries and 11 features, achieving an 87% accuracy rate in classifying data points
- Developed and evaluated various **ML models** using **TensorFlow/Keras** including k-Nearest Neighbours, Naïve Bayes, Logistic Regression, Support Vector Machine, and Neural Network

Website Data Analysis | *R, Git, HTML/CSS* | Source May 2018 – May 2020

- Implemented web scraping script based on HTML elements and performed data wrangling and visualization using **Tidyverse** packages
- Analyzed dataset, identifed patterns through hypothesis testing and regression analysis

Education/Professional Development

Bachelor of Applied Science in Computer Science, Minor in Statistics May 2020 – May 2025
Simon Fraser University *Burnaby, BC*

- GPA: 3.5, Dean's Honour Roll Fall 2023
- Concentration: Artificial Intelligence
- Relevant courseworks: R For Data Science (STAT240/260), Machine Learning (CMPT310), Probabilistic Analysis (STAT302), Data Structures and Algorithms (CMPT307)
- Data Analytic Certificate: clean, analyze data in Alteryx Designer; visualize data in Tableau and Power BI
- Social Activities: Co-Chair SFU Canadian Cancer Society (2022-2023)

Data Structure and Algorithm Cert. Jun. 2023 – Sep. 2023
University of California San Diego

- Skills: Algorithms (Greedy, Divide-and-Conquer), Dynamic Programming, Debugging, Software Testing