# Luan Nguyen

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## TECHNICAL SKILLS

Languages: Python, C++, SQL, NoSQL, PostgreSQL, R, Java, HTML/CSS, JavaScript

Developer Tools: Git, Docker, Jupyter, Tableau, Power BI

Frameworks: Django, REST API, JUnit

Libraries: NumPy, TensorFlow, Scikit-learn, Keras

## EXPERIENCE

# Data Analyst | Python, MS SQL, Tableau, Excel

Jan. 2024 - May. 2024

Vancouver Coastal Health @ Physician Quality Improvement Dept.

Vancouver, BC

- Perform data wrangling and manipulation tasks using Python and MS SQL across diverse quality improvement projects, ensuring the integrity and reliability of data for informed decision-making.
- Develop and optimize personal data infrastructure using Python, MS SQL, and Excel within enterprise data warehouse environment, enhance data accessibility and validation efficiency by 40% while fostering effective data communication.
- Streamline operational workflows through implementation of automation process using Python and Tableau API, facilitating the retrieval and dissemination of physician quarterly performance report, resulting in a 50% acceleration of the report cycle.
- Create dynamic and insightful data visualizations using **Tableau** and **Python**, illustrating team-based performance metrics to facilitate clear insights and support strategic decision-making initiatives.

#### Projects

#### Data Engine Pipeline | Docker, PostgreSQL, dbt, Airflow | Source

Dec. 2023 – Current

- Create 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 and performed data wrangling using RStudio.
- Visualized and analyzed dataset, identifed patterns through hypothesis testing and regression analysis.

Enterprise Database System | MySQL, HTML/CSS, PHP | Source

Jan. 2022 – Apr. 2022

• Designed a Database Management System (DBMS) with EER Model and Relational Schema.

Other Project | Java, Python, CLI, Git, Linux, Refactoring, Design Patterns | Source

Jan. 2022 – Current

- Developed multiple game engines such as 2D shooting game and chess engine with UI using **Java** with **design** patterns such as Singleton, Iterator.
- Developed CLI applications such as Weather Now, Time It, Hello chatbot using Python and Ubuntu CLI.

# 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: Data Structures and Algorithms, Data Science, Artificial Intelligence, Probabilistic Analysis
- 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

Remote

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