

# Luong Nguyen

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## TECHICAL SKILLS

- **Programming Languages:** Python (PySpark/Pandas), C/C++/C#, Java, SQL, JavaScript
- **Operating Systems:** Linux Ubuntu, Windows, macOS
- **IDES:** Eclipse, Visual Studio Code, PyCharm
- **Game Engines:** Unity

## PROJECT EXPERIENCE

### First-Person Shooter Game in C# with Unity

Personal Project

May – Dec 2024

- Implemented game logic including enemy AI, shooting, movement, HUD, objective tracking, interactions, and health with scripts and built-in Unity features such as the input system.
- Designed the game level, utilizing ProBuilder tool for map creation and NavMesh agents for enemy pathing and patrol routes.
- Enhanced game appearance by making use of free assets such as weapon models, sounds, and textures, along with creating animations for various actions.

### City Population Prediction in Python (With Pandas)

CMPT 353, Computational Data Science

Sept – Dec 2024

- Analyzed relationships among data by visualizing them with plots and performing T-Tests on divided sections to confirm initial hypotheses; filtering out inputs that did not pass.
- Created voting regression models with various algorithms, training them with some of the data and leaving the rest for scoring; fine tuning parameters to get the best results.
- Concluded in a written report that although some of the inputs were sufficiently related to population to imply correlation, the relations were not strong enough for reliable predictions.

### Top-Down Dungeon Game in Java

CMPT 276, Introduction to Software Engineering, SFU

Jan – April 2024

- Designed a top-down game with group members by creating a Unified Modeling Language diagram; easing the implementation process.
- Wrote scripts containing classes and methods that implemented image scaling, the health system, and random object placement; making use of libraries such as Image IO and Graphics2D.
- Created JUnit tests for various methods with assertion statements and functions from the Mockito framework to verify the game's functionality.

### Database Application in Python with SQLite

Jan – April 2024

CMPT 354, Database Systems I

- Implemented a database schema from an Entity-relationship model, creating corresponding tables along with their primary and foreign keys, checks, and triggers to reinforce dependencies.
- Wrote various queries and insertion/deletion operations for the database and integrated them into the application to use values provided by users.
- Created an interface in Python that displayed available query and database manipulation operations to users and asked for input.

## EDUCATION

### Simon Fraser University, Burnaby, BC

Sept 2021 - Present

- Bachelor of Science – Computing Science
- Minor in Business