# TAI LUAN NGUYEN Vancouver, BC | (778)-668 3009 tailuannguyen.com | luan\_nguyen\_3@sfu.ca

# **SKILLS**

PROGRAMMING LANGUAGES: C++, R, Python, Java, SQL

TECHNOLOGIES: Git, Docker, HTML/CSS, Linux

TOOLS: VS Code, RStudio, CLI, Emacs, MySQL, Power BI, MS Teams, Excel

# ACADEMIC/PERSONAL PROJECTS

### MACHINE LEARNING FOR BINARY CLASSIFICATION – Personal Project (Python)

August 2023 - Current

- Successfully conducted a binary classification involving dataset of 19,020 samples and 11 attributes.
- Developed and evaluated multiple ML models, including k-Nearest Neighbours, Naïve Bayes, Logistic Regression, Support Vector Machine, and a Neural Network using TensorFlow/Keras.
- Achieved up to 87% accuracy in classifying data points.

#### **WEB SCRAPPING** – R for Data Science (R, HTML/CSS) | STAT260

January - April 2023

- Implemented a web scraping script using R to extracted 6000 data entries with various attributes from Trustpilot reviews of Apple.com.
- Analyzed collected data, identified patterns and trends in negative reviews correlate with specific aspects of Apple, particularly high repair fee.
- Discovered several obstacles that can happen during scraping, including rate limitations, inconsistent data, UI interaction.

#### **INNOCENT CHESS ENGINE** – Personal Project (Java)

December 2022 - February 2023

- Developed a chess engine from ground up using Java, featuring an engine capable of detecting and preventing wrongful move by users.
- Implemented design pattern, including builder, abstract factory, and singleton.
- Designed graphical user interface (GUI) using the Swing and AWT framework.

### SPACE MONKEY - Software Engineering (Java) | CMPT276

September - December 2022

- Developed a shooting game from the ground up using Java and applied an iterative Scrum process.
- Employed design patterns including builder pattern, abstract factory pattern, and singleton pattern.
- Designed and implemented a user interface with various game states and levels using Java AWT/Swing Designer Tools.

#### DENTAL ENTERPRISE DATABASE SYSTEM - Database System (SQL) | CPSC2221

January – April 2022

- Implemented a complete database model for business with different attributes such as clients, staffs, products/services, payment methods.
- Designed Enhanced Entity Relationship Model and Database Relational Schema including table definition, constraints, and normalization.
- Extended project by personally developing a website using HTML/CSS and PHP. The website allows users to input and modify data in database.

# EDUCATION/PROFESSIONAL DEVELOPMENT

# BACHELOR OF SCIENCE IN COMPUTER SCIENCE, MINOR IN STATISTICS - Simon Fraser University

May 2022 - May 2025

- Concentration: Artificial Intelligence
- Relevant coursework: Data Structures and Algorithms, Artificial Intelligence, Data Science, Software Development, Computer System
- GPA: 3.5/4.33

#### ALGORITHMIC TOOLBOX - University of California San Diego

June - September 2023

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

### **DATA ANALYTICS SKILLS CAMP - Simon Fraser University**

June - September 2023

• Skills: Data preparation, cleansing, transformation, and analytics in Alteryx Designer, data visualization in Tableau and Power BI

### ASSOCIATE DEGREE IN COMPUTER SCIENCE - Languara College

May 2020 - May 2022

- Concentration: Computing Systems
- Relevant coursework: Object-Oriented Programming, Database and SQL, Data Structures and Algorithms

### EXTRACURRICULAR

## **CUSTOMER EXPERIENCE ASSOCIATE** – TD Canada Trust, Vancouver BC

July 2022 - January 2023

- Cultivated problem-solving skills through by active listening and applying a deep understanding of banking processes in various scenarios.
- Acquired experience in an office work environment, gained collaboration skill with the usage of technologies like MS Team, Slack, Zoom.
- Enhanced time management skills by prioritizing tasks and employed time-saving techniques.

## LOGISTICS CO-CHAIR - SFU Canadian Cancer Society, Burnaby BC

September 2022 – September 2023

- Enhanced creativity through designing poster and brochure that draw in large audience and boost donations for the organization.
- Improved communication skills by consistently introducing team members to others and persuading people to volunteer for the organization.