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

## **SKILLS**

PROGRAMMING LANGUAGES: R, Python, SQL, C++, Java TECHNOLOGIES: Git, Docker, HTML/CSS, Linux, Node JS

TOOLS: RStudio, VS Code, MySQL, Power BI, MS Teams, Excel, Word, PowerPoint

# ACADEMIC/PERSONAL PROJECTS

### **MACHINE LEARNING FOR BINARY CLASSIFICATION** – *Python – Personal Project*

August 2023 - Current

- Successfully conducted a **binary classification model** 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 Neural Network using TensorFlow/Keras.
- Achieved up to **87% accuracy** in classifying data points.

### **WEBSITE DATA ANALYSIS** – R, HTML/CSS – R for Data Science (STAT260 SFU)

January - April 2023

- Implemented a **web scraping** script using R to extracted 6000 data entries with various attributes from Trustpilot reviews of Apple.com.
- Conducted data cleaning procedures, including data types correction, examination of missing values, and data frame merging.
- Analyzed collected data through data visualization, identifying patterns and trends using regression analysis and hypothesis testing.

### **DENTAL ENTERPRISE DATABASE SYSTEM** – *SQL* – *Database System (CPSC2221 Langara)*

- 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 to input and modify data in database.

### INNOCENT CHESS ENGINE – Java – Personal Project



December 2022 - February 2023

- Developed a chess engine from using Java, applied techniques such as **Object-Oriented Programming (OOP)**, **encapsulation**, **polymorphism**.
- Enhanced code maintainability and reusability by applying of design patterns, including builder, abstract factory, and singleton patterns.
- Utilized event-driven approach, incorporated Google's Guava library, and Java AWT to create graphical user interface (GUI) for the engine.

### **SPACE MONKEY** – Java – Software Engineering (CMPT276 SFU)

September - December 2022

- Developed a shooting 2D game application from the ground up using Java and implemented iterative Scrum process, emphasizing regular collaboration, adaptability, and delivery of incremental results.
- Refined the game design, features by **setting clear goals**, **prioritizing features**, and **addressing development tasks** during each iteration.
- Applied design patterns including builder, abstract factory, singleton to enhance code structure and maintainability.

# EDUCATION/PROFESSIONAL DEVELOPMENT

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

*May 2022 - May 2025* 

- Concentration: Artificial Intelligence
- Relevant coursework: Data Science, Artificial Intelligence, Probabilistic Analysis, Data Structures and Algorithms, Software Development
- 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 - Langara College

May 2020 - May 2022

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

### EXTRACURRICULAR

### 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.

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

- 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.