Name

Vancouver, BC | (778) 555-5555 | email@sfu.ca <u>Github</u> | <u>Linkedin</u>

Education

Simon Fraser University Expected Graduation: August 2026

Bachelor of Science Degree in Computer Science

Key Classes: Database Systems, Data Structures & Algorithms, Computational Linguistics, Computational Data Science, Data Communications & Networking

Dalhousie University Graduated 2018

Bachelor of Science Degree in Kinesiology

Skills

Programming Languages: C, C++, Python, Java, Haskell, HTML

Frameworks/Libraries: PyTorch, Tensorflow, NumPy, Pandas, Spark, Matplotlib

Databases: PostgreSQL, MySQL (SQL), MongoDB (NoSQL)

Operating Systems: macOS, Windows, Linux

Project Experience

IELTS Automated Marker | C++

- Developed a C++ program to help improve the ease at which beginner English speakers can receive feedback on their International English Language Testing System writing exam practice.
- Constructed custom metrics to assess student writing, including negative patterns such as spelling mistakes and repeat word usage, as well as positive patterns such as the inclusion of a topic sentence and good conjunction placement.
- Achieved a 95% success rate at matching the professional marking of 20 test papers.

Matcha Latte Finder | Python, SQL

- Built a python application that allows users to search for cafes that have matcha lattes in any city worldwide using Google Places and Geocoding APIs, storing the data in an SQLite database.
- Designed a natural language processing pipeline to extract descriptive adjectives about matcha lattes from google reviews, enabling users to further filter cafes by keyword descriptors and rating thresholds.

Non-Playable Character (NPC) Dialogue Creation | Python, PyTorch

- Collaborated in a team of three to build a dynamic NPC dialogue system for a shared-town simulation, utilizing Google Gemini's API to generate realistic, memory-driven dialogue.
- Distilled dialogue data generated by a Gemma3-12b model into a lightweight Gemma3-1b model, significantly reducing computational costs while preserving high-quality NPC dialogue.
- Implemented a memory retrieval system for NPCs to recall and reference past interactions based on recency, importance, and relevance.

Analysis of COVID-19's Effect on Reddit Sentiment | Python, PySpark, NumPy, Pandas

- Analyzed sentiment trends in reddit posts before and after the COVID-19 outbreak using Spark and Pandas.
- Applied VADER and Hugging Face sentiment analysis models to classify emotional tone across thousands of posts.
- Performed statistical analysis, including independent t-tests, Shapiro-Wilk tests, Levene's tests, Cohen's d, Kruskal-Wallis tests, and Mann-Whitney U tests, to identify significant changes in sentiment over time.

Professional Experience

English Instructor, Cornerstone International Community College

August 2021 – September 2022

- Taught a 5-hour class going over all aspects of English from a beginner to an advanced level.
- Enhanced problem-solving and creative-thinking skills by answering questions for students about a variety of English grammar rules and vocabulary.
- Improved management skills by working with different personalities and learning styles in a classroom of up to 25 students.