

Work Experience:

-Data Analyst at RCMP Headquarters April 2025 - Present

-AI & ML Research Assistant at ROSIE Lab from Dec 2023 - Feb 2025.

ROSIE Lab is an AI Robotics lab interested in topics related to human-computer interaction (HCI) and affective computing. My research involves generative AI, LLMs, and motion capture Data.

- Conducted individual and collaborative research through literature reviews to stay updated with the latest advancements, methodologies, and findings in the field of AI & machine learning.
- Collaborated within a team to conduct experiments, data collection, and analysis. This includes setting up experiments, running simulations, and processing large datasets.
- Contributed to the development and implementation of algorithms and models.
- Co-author on a paper and a dataset that are currently pending publication.

Research:

-Motion Capture Human Interaction Dataset - Co-Author

Collecting and analyzing a large motion capture dataset consisting of salsa dancers of varying levels (beginner, intermediate, professional) improvising to different music. Aiming to better understand haptic interaction and non-verbal communication, as well as train an LLM to classify and generate quality dance movements. Possible applications include teaching, generative AI, and assistive robotics.

-Generative Motion Style Transfer Paper - Research Assistant

Building and applying generative and diffusion models to motion capture datasets of performers of varying levels in order to generate movement at specific skill levels. Aiming to create more realistic, natural looking skill-based animations. Possible applications include CGI, teaching, and animation.

Projects:

-Library Database and Book Recommendation System:

Developed a collaborative filtering recommendation system in Python, leveraging existing book rating databases, processed using Pandas, and implementing a relational user database using PostgreSQL. Currently enhancing the project by creating a web-based front-end to offer users more interactive features.

-Full Stack Racing Game Web Application – Academic project:

Developed a full stack web-based racing game application allowing users to create profiles, add friends, engage in real-time chat, and compete against each other. Implemented using JavaScript for frontend interactivity, HTML/CSS for styling, Node.js for server-side logic, PostgreSQL for database management, and Socket.IO for real-time communication.

-Trip Planning Map Service – Academic project:

Built a Python-based map service using PySpark, Folium, NumPy, and Pandas to process user input collections of geotagged images, compare image metadata to OpenStreetMap data, calculate distances via the Haversine formula, and generate interactive maps.

-More projects can be found on my website or my Github.

Education:

-Grad. 2024 with a Bachelor of Science in Mathematics and Computing Science at Simon Fraser University, and a minor in curriculum and Instruction in Education.

-Starting MSc in Sept 2025.

Skills:

Languages C++, Golang, Python, JavaScript, Java, SQL, HTML/CSS, MATLAB.

Frameworks & Technologies React, Next.js, nodeJS, Git, AWS, and more.

Involvement and Awards:

-President/Captain of SFU Athletics Dance Team from 2020-2022: I ran the entire team, including scheduling, finance management, training, community outreach, and social media.

-Executive assistant of SFU Athletics Dance Team from 2018-2020: Responsibilities included scheduling, training, and social media.

-SFU Dean's Honour Roll (x3) Awarded to full-time students with a GPA above 3.5/4.0

Hobbies:

-Reading

-Hiking

-Photography

-Gaming