

## EDUCATIONAL EXPERIENCE

**McGill University** – Faculty of Science, Montreal, Canada

Sept 2021 – May 2025 (expected)

*Bachelor of Science*, Major in Computer Science and Biology, CGPA: 3.83 / 4.00

Core Courses:

- University-level Mathematics: ordinary differential equations; multivariable calculus; vector calculus; partial differential equations (intro); Fourier series; Fourier transform; Laplace transform; probability and statistics; discrete mathematics; linear algebra
- Java Programming: object-oriented design; linked lists; queues; stacks; sorting algorithms; recursion; trees; hash maps
- Signals, Systems and Control: discrete- and continuous-time signals; basic system properties; linear time-invariant systems; convolution; frequency domain analysis; filtering; sampling
- Engineering Principles in Physiological Systems: basic aspects of nervous system, circulatory system, and respiratory system; models and control theory of physiological systems

**Marianopolis College**, Montreal, Canada

Aug 2019 – June 2021

*Quebec College Studies Diploma (CEGEP)*, Program: Health Science

Awards:

- Dean's List for achieving an academic average above 85% 2019 – 2021
- Graduates Honour Roll June 2021

## INTERNSHIP EXPERIENCE

**Biomedical Science Intern**, Ruiping Health Technology, Shenzhen, China

July 2023 – Aug 2023

- Studied knowledge of AI and ChatGPT's applications in biomedical science through assisting an AI computer scientist.
- Researched to design a novel treatment for chloasma.
- Filled in the medical device registration documents.

## PROJECT EXPERIENCE

**Intracranial Pressure (ICP) Analysis and Modelling**, McGill University, Montreal, Canada

2023

- Performed data analysis and extracted information from raw ICP signals of patients with traumatic brain injury, using both time domain and frequency domain analysis methods.
- Attempted to implement a mathematical model from existing literature to investigate the interaction between ICP and cerebral dynamics.

**Implementation and Usage of Hash Maps for Data Analysis**, McGill University, Montreal, Canada

2023

- Constructed a customized hash table data structure for analyzing the data from Rate My Professors website.
- Used the customized hash table to implement data analysis features of interest such as the rating distribution of a professor, the comparison between male and female professors, etc.

**Block Game**, McGill University, Montreal, Canada

2023

- Used quad-trees to model hierarchical data.
- Implemented recursive methods to make a game that involves the structure of recursively defined quad-trees.

**Online Travel Agency**, McGill University, Montreal, Canada

2023

- Used object-oriented design to simulate an online travel agency.
- Implemented the methods required in a travel agency system such as flight reservation, hotel reservation, etc.

## SKILLS AND INTERESTS

**Language Skills:** Fluent English, Mandarin, and Cantonese; basic French

**Computer Skills:** Python, Java, and MATLAB programming; Inkscape; basic video editing

**Interests:** Snowboarding; travel; cooking; camping; kayaking; stand up paddling