

## EDUCATION

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### University of Toronto

Honour's Bachelor of Science

Specialist in Computer Science (ASIP co-op) & Major in Cognitive Science

September 2021 - June 2025

GPA: 3.67/4.0

## SKILLS AND TECHNOLOGIES

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**Programming:** Python, Javascript/Typescript (ReactJS, NodeJS), HTML, CSS, Java, C, PHP, C# (.NET Core), Golang

**Databases:** MySQL, PostgreSQL, MongoDB, Firestore

**Tools:** Git, Docker,  $\text{\LaTeX}$ , AWS, VS Code

## EXPERIENCE

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### NerveX Neurotechnologies

Software Engineering Intern

May 2023 - Present

Toronto, ON

- Optimised data retrieval algorithms for a .NET Core API by implementing background workers using Hangfire and reducing calls to AWS S3 leading to average performance improvements of over 600%
- Implemented new features and patched bugs for a custom Typescript and React charting library designed to display high-frequency time-series data from medical devices

### University of Toronto Machine Intelligence Student Team

Web Developer

October 2022 - Present

Toronto, ON

- Designed and implemented the website for the inaugural edition of Hack the Mist, an applied machine learning MLH-partnered hackathon, by using React, Typescript, along with ChakraUI

### Fair

Web Developer

May 2021 - May 2022

Oxford, UK (Remote)

- Developed a prototype paper-trading web application using Golang with live price information and trading functionality with mock accounts stored in MongoDB
- Collaborated with colleagues in a tight-knit, fast-paced startup environment using the SCRUM framework to efficiently develop an ESG financial education and trading platform

## PROJECTS

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### Street Savvy 🐍 (Python, ReactJS, Firebase)

- Developed a React web app to suggest Toronto restaurants using a custom recommendation engine fed with data from over 1300 locations aggregated used Google Places API and stored in a Firestore database
- Created a RESTful API in Python with Flask to handle user actions and recommendation generation
- Employed the Cohere NLP API to extract location categories and to summarize Google Maps reviews

### Twitter Geo-Sentiment 🐍 (Python, ReactJS, MongoDB)

- Built a full-stack web app allowing for queries analysing and visualising regional sentiment towards a given topic using the Twitter API
- Achieved a predictive accuracy of 90% using a Naïve Bayes model trained using NLTK and Scikit-learn
- Created a frontend with React that interacts with a Flask RESTful API that interacts with the Twitter API, performs sentiment analysis, and stores data using MongoDB

### Fourier Series Animation 🐍 (ReactJS)

- Constructed a web app in React for approximating user-inputted curves using the Fourier series
- Implemented animations efficiently based on custom algorithms for evaluating complex definite integrals
- Employed the Canny algorithm to extract edges from images to generate a function able to be approximated by the Fourier series