

EDUCATION

University of Toronto

Honour's Bachelor of Science

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

September 2021 - April 2025

GPA: 3.67/4.0

SKILLS AND TECHNOLOGIES

Programming: Python, Javascript/Typescript (ReactJS, NodeJS), HTML, CSS, Java, PHP, Golang

Databases: MySQL, PostgreSQL, MongoDB

Tools: Git, Docker, L^AT_EX, Excel

EXPERIENCE

University of Toronto Machine Intelligence Student Team

Web Developer

October 2022 - Present

Toronto, ON

- Designing and implementing the website for an upcoming applied machine learning MLH hackathon
- Standardising UTMIST project websites by devising a flexible and customisable front-end template

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
- Built UI components and pages in NextJS to display content fetched from an internal API
- 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

Park Lane International School Model United Nations

Head of Digital Operations

April 2018 - June 2021

Prague, Czech Republic

- Designed, developed, deployed, and maintained a custom full-stack online platform to facilitate delegate applications and conference administration for over 500 attendees
- Enabled comprehensive user and data management through a PHP backend and MySQL database
- Enhanced outreach through advertising and facilitated data collection through Google Analytics

PROJECTS

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

- Built a full-stack web app allowing for queries analysing and visualising regional sentiment towards a given topic on Twitter
- 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 REST API that interacts with the Twitter API, performs sentiment analysis, and stores data using MongoDB

Orbital Physics Simulation 🐍 (Python)

- Implemented Newtonian physics in PyGame using data from the JPL Horizons database to simulate the movements of celestial bodies in real-time
- Recorded and analysed 100k data entries to model Kepler's laws of planetary motion to within 94% accuracy

Fourier Series Animation 🐍 (ReactJS)

- Constructed a web app in React for approximating user-inputted curves using the Fourier series
- Implemented animations efficiently based on mathematical computations with custom algorithms for evaluating complex definite integrals
- Devised responsive and interactive UI components using ChakraUI