Education

2022

2021 - 2026 Honours Co-op Bachelor of Computer Science and Bachelor of Business Administration,

University of Waterloo, Wilfrid Laurier University Waterloo, Canada

GPA 3.7/4

Undertook advanced versions of classes where we wrote compilers, learned about advanced data structures, efficiency of programs, and digital logic.

Compute Ontario Summer School

COSS is a set of courses taught by accredited researchers, where I studied topics centered around data science such as Programming GPUs, High Performance Computing, and Deep Learning.

Work Experience

Undergraduate Research Assistant, *University of Waterloo* 05/2022 - present

- Currently researching fake news detection, by creating a browser extension that uses a model to classify articles. Looking to **publish** a **research paper** on findings when complete.
- Cleaned data and created new features based on article metadata, resulting in an improvement of over 20% in precision and recall.
- Models were created and tested using **Pytorch** using **CUDA** GPUs, using **HPC** techniques such as parallelization on supercomputers resulting in fast turnaround on testing and ideation.

09/2021 - present **Lifeguard,** *University of Waterloo*

- Work with swimmers of all ages and abilities, upholding a fun and safe environment.
- Manage 60+ young campers by explaining rules, performing swim tests, and comforting.

06/2020 - 09/2020 Full Stack Developer, Prof. Mei Naggapan

- Planned requirements, timelines, and distributed work to a team in order to upgrade an existing site with new features, resulting in a new site with modern infrastructure for the client.
- Improved user experience by using Bootstrap framework and using Elasticsearch to add searching by tags, making the site easier and faster to navigate.

Skills

Languages

Python - C++ - C - JavaScript - Java

Tools, Libraries, Experience

Google CP - MongoDB - React - GNU CLI - PyTorch Tensorflow - Cuda - MPI - Numba - Slurm - Paraview

Projects

DataFest 2022 Participant and Winner (Best Insight), Python

Working in a team of three we analyzed a large and noisy dataset from an educational game, looking for trends. We then created a winning presentation in which digested our findings, offering insights on how to make the game more effective.

Maze search and Sorting Visualization, Javascript, React □

- Made an interactive JavaScript React webapp, where users can create a custom maze for various algorithms to navigate.
- Both visualizations were created by coding the algorithms from scratch, resulting in an efficient and custom presentation.

University of Waterloo Alternate Fuels Team (UWAFT), Python, bash

- Working as a core member, collaborating with teammembers to create weekly sprints, working towards long-term goals.
- Automated startup and testing sequence using bash scripts, saving time for every time the car was started.
- · Created documentation by taking notes from on-the-fly debugging during track day testing sessions.