

## Skills

**Web Development:** Comfortable using HTML, CSS, JavaScript, and Bootstrap to create front end web apps. Coursework experience with jQuery and Vue.

**Backend Development:** Teaching assistant experience using Java and Glassfish to create both Restful and Web Socket based backends.

**Mobile Development:** Coursework experience using Flutter, Dart, and Firestore to create multi-platform full stack mobile apps.

**Data Science and Visualization:** Coursework experience with Data Mining, Big Data Analytics, Computer Vision, and Data Visualization. Used languages such as Python and R, and using libraries such as Pandas, NumPy, Matplotlib, SkLearn, OpenCV, and GGPlot.

**General Software Development:** Comfortable with several programming languages such as Python, C++, Java, JavaScript, and Rust. And lesser exposure to languages such as C# and Kotlin. Comfortable with several tools such as Windows, Linux, Git, and VS Code. And lesser exposure to tools such as Maven. Understands the basics of relational database design, and querying using SQL.

## Personal Skills

- Quickly able to adapt to new programming languages and tech stacks.
- Adept at time management.
- Experienced in collaborative programming using Git and GitHub.
- Proficient with teaching programming and teaching troubleshooting techniques.

## Work Experience

### Teaching Assistant (Software Systems and Integration)

3rd January 2023 - 22nd April 2023

Ontario Tech University

- Led 20 students through several lab activities involving Java and Glassfish backends and HTML and JavaScript frontends.
- Explored file access, multithreading, network communications, and working with build tools.

### Deputy Tabulator

25th May 2022 - 4th June 2022

Elections Ontario

- Held responsibility for a tabulation machine during the 2022 Ontario Election.
- Tested the accuracy of the machine, received and counted ballots, submitted results, and returned the tabulation machine, all according to strict procedure.

### Cashier and Meat Department Clerk

2014 - 2017

Food Basics, Listowel Ontario

- Responsible for large amounts of money, as well as verifying ID for lottery and tobacco products.
- Engaged in shelf stock management and department cleanliness.
- Operated with a high degree of independence due to the small department size.

## Education

### Ontario Tech University

Bachelor of Science, Computer Science - Data Science Specialization

Completed 2023

- Minor: Astronomy

## Projects

### Image Cartoonizer

[GitHub](#)

[Website](#)

- Demonstration of using OpenCV for image processing and computer vision in a Python Jupyter Notebook environment, specifically using color flattening and canny edge detection.

### GeoPhoto Social Media Prototype

[GitHub](#)

- A mobile app made using the flutter framework in collaboration with 3 others in a mobile development class. It's a prototype social media site where users can post geolocated photos on a map, with the data stored on Firebase.

### Web Development Group Project

[GitHub](#)

[Website](#)

- A web application build using Vue and Node.js in collaboration with 4 others in a web development class. Contains several simple video games.

### Data Mining Association Algorithms Comparison

[GitHub](#)

- Various data mining association algorithms implemented in Rust for benchmarking and comparison. The algorithms are Apriori, PCY, Multi Hash PCY, Ransom Sample Apriori, and SON.

### Boid Behavior Model

[Github](#)

[Website](#)

- Made with Rust, Using Web Assembly and the Bevy Game Engine. This demo shows a model for boid behavior, seen in the real world in structures such as schools of fish.