

## HIGHLIGHTS

- Efficient in learning new tools and technologies
- Skilled and enthusiastic in web development, games and UI/UX design
- Well-versed in software development life cycles
- Reliable team player - enjoys sharing, discussing and learning new ideas and approaches

## EDUCATION

- 📎 **B.S. Computer Science Co-op**  
**Ontario Tech University - Oshawa ON**  
2017 - 2022

## TECHNICAL SKILLS

### \* Programming

JavaScript, Python, Java, Kotlin, Dart, C++, C#

### \* Web Development

React, Node.js, HTML, CSS, Webpack, Flask, Socket.IO

### \* Tools & Technologies

Bash, Git, Flutter, Unity, Docker, MySQL, MongoDB, PostgreSQL, Firebase, Linux/UNIX, Windows

### \* Patterns & Practices

UI/UX Design, Object Oriented Programming, UML, Functional Programming, Wireframing, Algorithms, Data Structures

## WORK EXPERIENCE

- **Web Developer, UG Research Fellow** [cardit.vialab.ca] [covidconnect.me]  
**vialab - Oshawa ON**  
**Project 1** - Built Card-IT, a web app that teaches Italian verb morphology through flashcards. Users can study and be quizzed on decks of verb conjugation flashcards that they organize for themselves. Developed a visually appealing frontend with React and Sass along with its backend built with Flask and MySQL.  
**Project 2** - Collaborated in developing Covid Connect, a web app that serves as a mental health chatbot for people to share their stories and difficulties related to the COVID-19 pandemic. Designed a novel visualization system using D3.js and Pixi.js which allows users to view stories of others that are similar to their own.  
*May 2020 - Apr 2022 — D3.js, Pixi.js, React, Sass, Webpack, Flask, MySQL, Docker*
- **Teaching Assistant**  
**Ontario Tech University - Oshawa ON**  
Managed, marked and assisted students in labs for Intro to Programming for Scientists (Python) and Programming Workshops I/II (C++). These courses cover programming fundamentals, problem solving strategies, memory management and documentation.  
*Jan 2020 - Apr 2020, Sept 2021 - Apr 2022 — Python, C++*

## PROJECTS

- **Card-IT Multiplayer Gamification [UG Honours Thesis]** [carditversus.vialab.ca]  
Gamified a language learning application (Card-IT) so that multiple players race through a quiz. Players can assist themselves and slow down their opponents by using items gained along the way. Multiple Card-IT sessions communicate through Socket.IO.  
*Sept 2021 - Apr 2022 — React, Sass, Socket.IO, Flask, MySQL*
- **Mushroom Vengeance** [shawnyama.itch.io/mushroom-vengeance]  
A 2D platformer game developed in Unity. Achieved a pleasant aesthetic by melding various open-source art and music. The player can slash his sword and shoot wind beams with it to attack mushroom enemies. The goal is to reach the end of the level to uncover who turned all the mushrooms into beasts.  
*Mar 2021 — Unity, C#*

## ➤ QuizMe

[[github.com/TylerBroda/QuizMe](https://github.com/TylerBroda/QuizMe)]

An Android app where users can create their own multiple choice quizzes for studying. Quizzes made by others can be explored and filtered through by category. A specific user can be followed to easily view their quizzes.

*Nov 2021 - Dec 2021 — Flutter, Dart, Firebase, SQL*