

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
- **QuizMe** [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