

HIGHLIGHTS

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

EDUCATION

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

TECHNICAL SKILLS

- * **Programming**
JavaScript, TypeScript, Python, Java, Kotlin, 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, Agile/Scrum, Debugging

WORK EXPERIENCE

- **Full Stack Web Developer - UG Research Fellow** vialab - Oshawa, ON
Card-IT [cardit.vialab.ca] - 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.js and Sass along with its backend built with Flask and MySQL.
Covid Connect [covidconnect.me] - Collaborated in developing, a web app that serves as a mental health chatbot for sharing stories and difficulties related to the COVID-19 pandemic. Designed and built a novel visualization system using D3.js and Pixi.js which allows users to explore stories of others that are similar to their own.
LangEye [llar.apps.science.ontariotechu.ca] - Teaches names of real life objects that are identified by a phone camera and Google Vision API. Revamped the frontend for a more user-friendly language learning experience.
May 2020 - onwards — D3.js, Pixi.js, React, Sass, Webpack, Flask, MySQL, Docker
- **Teaching Assistant** Ontario Tech University - Oshawa, ON
Managed, graded 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 can compete in verb conjugation quizzes. Multiple Card-IT sessions communicate through Socket.IO. Players can assist themselves and slow down their opponents by using items gained during the game.
Sept 2021 - Apr 2022 — React, Sass, Socket.IO, Flask, MySQL
- **Mushroom Vengeance** [shawnyama.itch.io/mushroom-vengeance]
A 2D platformer game developed in Unity. The player can slash his sword and shoot tornadoes to attack mushroom enemies. Created a pleasant gameplay experience by testing the level design and player movement. Achieved a pleasant aesthetic by melding various open-source art and music.
Mar 2022 — 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