

Bailey Chittle

SOFTWARE ENGINEER

Windsor, Ontario, Canada

🏠 chittle.codes | 🐙 bachittle | 🌐 bailey-chittle

Education

University of Windsor

B.C.S. IN COMPUTER SCIENCE HONOURS

Windsor, Canada

Sep. 2018 - Aug. 2022

- **92% GPA**, Dean's List and Entrance Scholarship
- NSERC Research Grant with Dr. Lu in **natural language processing**. Created a **Word2Vec** visualization tool.
- Worked on a **distributed peer discovery protocol** for a Mesh VPN written in **Golang** for my capstone project.

Experience

Tessonics

SOFTWARE ENGINEER

Windsor, Canada

June 2022 - Present

- Performed matrix and linear algebra in a C++ library for ultrasonic deconvolution
- Increased the speed of a matlab library by over **600%** by translating to C++

Ground Effects

INFORMATION TECHNOLOGY CO-OP

Windsor, Canada

June 2019 - August 2019

- Added new features and fixed bugs in a development server of a web application **used by hundreds** of Ground Effects employees
- Developed and edited **PHP back-end** code, and pure **HTML/CSS/JS front-end** code
- Had access and made changes to **MySQL** and **SQL Server** databases and created stored procedures to view data reports in SSRS
- Improved the speed of the VIN search engine by over **30%** by using more optimized **SQL queries**
- Created automated workflows using **Selenium** and **PyAutoGUI**

University of Windsor - Ignite program

WEBSITE DEVELOPMENT RESEARCH STUDENT

Windsor, Canada

January 2021 - Present

- Maintained and added new features to a **full-stack web project** called vesicle viewer (located publicly at www.vesicleviewer.dmarquardt.ca)
- Created a new personal website for Dr. Drew Marquardt located at www.dmarquardt.ca. Written in **Bootstrap** for a fresh modern user experience.
- Implemented the foundation for a new project landing page for Dr. Marquardt's team, titled PCCans. Located at www.cans.dmarquardt.ca
- **Mentored** biology students for their **Python** programming projects

University of Windsor

TEACHING ASSISTANT

Windsor, Canada

September 2019 - Present

- taught the following courses while also taking a full-time course load: Theoretical Foundations in CS, Languages Grammars, Advanced C++, Key Concepts in CS, and Intro to Algorithms 2

Skills

Programming Languages	Python, C++, JavaScript, Golang, C#, Java, C
Front-end Web Dev	React, Typescript, Vue
Back-end Web Dev	Django, REST API, Flask, Caddy, PHP
Server Administration	Linux cloud servers, AWS, Windows IIS, phpMyAdmin
DevOps	GitHub Actions, Docker

Projects

UTable.net University Timetables

TEAM LEADER

Windsor, Canada

Jun. 2020 - Aug. 2021

- Initially developed a proof-of-concept application for UTable.net, written in **Flask** and pure **HTML/CSS/JS**
- Lead and organized a team to develop a more sophisticated website, written in **React** for front-end and **Django REST API** for back-end
- Created a **PostgreSQL** database for efficient secure storage of user information
- Fully featured login system for persistent user data
- Created **automation scripts** for scraping university timetable data for usage in the **fuzzy search engine** for selecting courses
- **CICD** integrated in multiple repositories in a private GitHub organization
- **Ubuntu Linux server** hosted on the cloud via DigitalOcean