

BRIAN GAO

✉ bhgao@uwaterloo.ca 📧 briangao.me 🔗 linkedin.com/in/bhgao 🐙 github.com/BENJIGAO

SKILLS

Languages HTML/CSS, JavaScript, Ruby
Frameworks React, React Native, Node.js
Libraries/Tools React Navigation, Git, VS Code, Chrome Dev Tools, Oracle VM

PROJECTS

Etch-a-Sketch | React, CSS, Git

- A web drawing application that supports features such as an eraser and different colours for an delightful user experience
- **Reduced lines of code by 20%** by refactoring entire project using **React**
- Employed DOM manipulation on the drawing grid using React functional components and hooks to simulate drawing

Fitness 15 (XHacks Project) | React Native, React Navigation, Node.js

- A mobile fitness app built with **React Native** that promotes healthy living by connecting people with gym buddies
- Implemented user authentication logic by extracting and comparing user input to data from database
- Designed screen navigation system with **React Navigation** to allow for a seamless user flow

Tic-Tac-Toe | Ruby, Git

- A terminal-based recreation of Tic-Tac-Toe that features clear visuals and instructions so to increase user convenience
- Modelled system architecture after OOP principles, resulting in an increase in code encapsulation and reusability
- Integrated **Git** to the workflow by staging/committing often to create clean and documentable code

Calculator | JavaScript, HTML/CSS, Git

- A web calculator with complex functionality and keyboard support that emphasizes user-centered design
- Ensured a **0% failure rate** by constructing edge and special cases and manually testing them against the code
- Facilitated temporary data storage using HTML data attributes to ensure that calculations were made correctly and quickly

EXPERIENCE

Incoming Firmware Team Member | Python, C, Confluence, Slack

Sep 2021 – Present

Midnight Sun Solar Car Team

Waterloo, ON

- Completing onboarding process to program firmware and write unit tests to ensure **100% code coverage**

Receptionist | Excel, Word, Gmail

Nov 2018 – Apr 2020

Ware Academy of Music

Toronto, ON

- **Increased sales by 10%** by cold calling **40+ past clients** and pitching them new lessons
- Managed **15+ Excel spreadsheets** containing info from **100+ students** by documenting business expenses and goals

AWARDS

YCDSB 2021 Top Scholar

Jul 2021

York Catholic District School Board

Thornhill, ON

- Received highest rating **out of 5000 students** for achieving a **100% average**

School Awards (6)

Jun 2021

St. Robert Catholic High School

Thornhill, ON

- Achieved **1st place out of 400 students** in 6 grade 12 subjects (3 math, 2 science, 1 humanities)

EDUCATION

University of Waterloo

Sep 2021 - May 2026

BASc in Systems Design Engineering

Waterloo, ON

- Relevant Courses: Digital Computation (C++), Graphical Design (OnShape), Introduction to Design

HOBBIES & INTERESTS

Hiking, Basketball, Burgers (with poutine of course), Anime, K/DA (best music group ever)