BRIAN GAO

✉ bhgao@uwaterloo.ca   🅑 briangao.me   in linkedin.com/in/bhgao   github.com/BENJIGAO

SKILLS

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

PROJECTS

Etch-a-Sketch ↗ | *React, CSS, Git*
- Created a web drawing application that supports many artistic tools for a delightful user experience
- Refactored code with **React** after revisiting the project, resulting in a **20% reduction in code length**
- Employed React functional components and hooks to simulate drawing by manipulating the DOM

Fitness 15 (XHacks Project) ↗ | *React Native, React Navigation, Node.js*
- Developed a mobile fitness app 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*
- Built a terminal-based recreation of Tic-Tac-Toe that features clear visuals/instructions to increase user convenience
- Integrated **Git** to the workflow by staging/committing often to create clean and documentable code
- Modelled system architecture after OOP principles, resulting in an increase in code reusability

Calculator ↗ | *JavaScript, HTML/CSS, Git*
- Designed a web calculator with complex functionality and keyboard support that emphasizes user-centered design
- Increased input reliability by constructing 10 edge 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

Firmware Team Member | *Python, C, Jira, Confluence*   Sep 2021 – Present
Midnight Sun Solar Car Team   *Waterloo, ON*
- Ensured **100% code coverage** by completing onboarding process to program firmware and write unit tests (in progress)

Receptionist | *Excel, Word*   Nov 2018 – Apr 2020
Ware Academy of Music   *Toronto, ON*
- Increased sales by 10% by cold calling 40+ past clients and promoting new lessons

AWARDS

YCDSB 2021 Top Scholar   Jul 2021
York Catholic District School Board   *Aurora, ON*
- Received highest rating **out of 6000 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++), Engineering Visualization (OnShape), Introduction to Design

HOBBIES & INTERESTS

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