

Brian Tran

b28tran@edu.uwaterloo.ca

linkedin.com/in/tranbrian10 | github.com/tranbrian10

// SKILLS

JavaScript • jQuery • Node.js • Python • SQL • C# • C++ • HTML • CSS • Bootstrap • Polymer • Jasmine • Selenium

// EXPERIENCE

Software Developer, R&D

National Instruments | Toronto, ON | September 2017 – December 2017

- Developed asynchronous features, such as drag-and-drop, for an online circuit simulation app using JS Promises
- Performed **research** tasks and created reports to determine possibilities for future development
- Worked with a mentor to introduce Selenium testing into a large-scale web app to offer a more robust test suite
- Created tools to stream and view real-time signal data from electronic instruments using **WebRTC**

Full-Stack Web Developer

VIQ Solutions | Markham, ON | January 2017 – April 2017

- Built and deployed a RESTful **Web API** using C# to allow for control of desktop software from a mobile app
- Created a custom MPEG-DASH **video player** with JavaScript Media Source Extensions to reduce bandwidth costs
- Developed features across the entire stack for a web and mobile education portal using .NET and SQL Server
- Researched, designed, and implemented a new **back-end solution** for an existing audio/video product ecosystem
- Demoed products to potential clients with the sales team to secure high-value contracts worth over **\$400k**

Web Developer

Intellisoft Development Inc. | Toronto, ON | May 2016 – August 2016

- Rebuilt a college's online course search tool using AJAX and IndexedDB caching to return results over **200x faster**
- Implemented custom user analytics on the search tool to learn from user data from over **1 million** visits per year
- Collaborated with teammates and clients to implement a site-wide cart for adding and comparing courses
- **Analyzed page visit data** to suggest popular related courses to users, resulting in increased enrollment volume

// PROJECTS

CUTC Technology Lead | HTML, CSS, jQuery

- Volunteered as **Technology Lead** for the 2017 Canadian Undergraduate Technology Conference
- Built the website, handled AV requirements, and coordinated with 20+ team members to organize CUTC 2017

Cartastic | Node.js, Swift

- Worked on a team at MSFTHack 2017 to build an app that adds food photos to a cart and provides relevant recipes
- Used Node.js to pass formatted JSON data from Microsoft's **Computer Vision API** to an iOS mobile app

Chocolate Sweeper | C#

- Applied OOP principles to organize object hierarchies and functions in a Minesweeper game
- Designed a **breadth-first search** algorithm using a queue to efficiently filter and reveal adjacent tiles upon user click

Pic Processor | C#

- Built a Windows desktop app that allowed users to load, manipulate, and save images
- Wrote algorithms that performed **kernel convolutions** to apply effects such as darken, scale, flip, and blur

// EDUCATION

University of Waterloo | 3A Computer Engineering Co-op | September 2015 – April 2020

- Placed on the Dean's Honours List in Winter 2016

// INTERESTS

Graphics programming • Computer vision • Data analysis • Gaming • Photography • Singing • Fitness • Psychology