

# Cristian Brazales

Computer Engineering Student — Vancouver, Canada

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🌐 CristianBrazales

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## EDUCATION

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**University of British Columbia**

*Bachelor of Applied Science – Computer Engineering*

**Vancouver, BC**

*May 2020*

## KEY SKILLS

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<b>App and Web Development</b>	React Native, Android Studio, React, HTML, CSS
<b>Back End</b>	Node Js, Relational and NoSQL DB, Cloud deployments DB
<b>Programming Languages</b>	C, C++, Java, JavaScript, Python
<b>Hardware design</b>	Verilog, FPGA, Arduino, Raspberry Pi
<b>Tech platforms</b>	Matlab, R, AWS, Microsoft Azure, Quartus, Modelsim

## PROJECTS

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### **Live RockStar**

*October 2019*

- Group project.- Game proof of concept, the player touches the buttons on the screen with the head, loses on a miss of the button. The browser streams frames to the server where a machine learning algorithm locates the head and extrapolates this data. Server responds with the position and the game status.
- Individual responsibilities.- Programmed the server side as well as implemented the machine learning algorithm, helped to develop the web application and communication with the server

### **Age Restricted Vending Machine**

*Jan 2019 – Mar 2019*

- Group project.- Prototype of a real vending machine remotely secured by android app. The vending machine scans the id and compares to a cloud DB. The app requires facial recognition, digital print, expiring confirmation code to access products, and suggestions based on previous purchases
- Individual responsibilities.- Programmed the user interface of vending machine, helped to develop the mobile app, user interface, data communication of device and DB, data statistics analysis

### **Rental Finder**

*Sep 2018 – Nov 2018*

- Group project.- Android and IOS mobile app that aims to improve the search of housing in Vancouver. The app helps to post and search for places in the Vancouver area. User interface developed in react native, back end with NodeJS, mongo DB, and deployed to Amazon Web Services
- Individual responsibilities.- Programmed the user interface using React Native (JavaScript based) and data communication between app and DB

### **Smart Secure Door System "HERON"**

*Feb 2018 – Apr 2018*

- Group project.- Prototype of a remotely controlled door system with camera, password keypad and locks
- Individual responsibilities.- Programmed an Arduino and Raspberry Pi to control the system and password verification between the device and DB

### **Smart Energy Efficient Room**

*May 2017 – Jun 2017*

- Group project.- Proof of concept of how controlling home appliances by reading outside sensors (temperature and light) can save energy to the customer.
- Individual responsibilities.- Programmed the system, using C language, that was later uploaded on the Arduino.

## EXPERIENCE

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### University of British Columbia

Vancouver BC, Canada

Teacher Assistant in Introduction to Computation in Engineering design

Aug 2018 - Apr/Sep - Present

- Introductory C programming course for engineering students covering software design principles with a focus on engineering problem-solving
- Supporting students to learn C by answering in-class questions on topics such as functions, loops, file I/O
- Supervising students in programming labs, marking midterms and finals exams

## VOLUNTEERING

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### University of British Columbia

Vancouver BC, Canada

Vantage Peer Mentor

Oct 2017 - Apr 2018

- Volunteered as mentor, supporting new international students at UBC. My duties were the following:
- Organized events to support students either by past experience or by referring them to the appropriate counselling
- Attended training sessions organized by UBC Peer Mentor Programs
- Planned and facilitated the recruitment and selection process of new mentors, learning interview practices

## AWARDS AND ACHIEVEMENTS

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### Winners of Rogers 5G Edge Challenge

Vancouver BC, Canada

Rogers 5G Edge Challenge Hackathon

October 2019

- Our team was awarded with the first place at the Rogers 5G Edge Challenge with the project Live RockStar

### Vantage One honorific mention in project competition

Vancouver BC, Canada

Vantage One Capstone Conference – UBC Vantage College

Jul 2017

- Awarded with honorific mention for the project of a prototype of Smart energy efficient room mentioned above

### Universities of Excellence Scholarship

Quito, Ecuador

Ecuadorian National Secretary of Higher Education, Science and Technology

May 2015 - Present 2018

- Full ride undergraduate scholarship granted by the Government of Ecuador. It provides full funding to study abroad at one of the world's top universities

## ABOUT ME

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- Motivated and eager to learn emerging technologies
- Strong communication skills
- Excellent work ethic, personality and tenacious attitude
- Enjoy cooking different cuisines and traveling