

Cristian Brazales

Computer Engineering Student — Vancouver, Canada

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🌐 CristianBrazales

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EDUCATION

University of British Columbia

Bachelor of Applied Science – Computer Engineering

Vancouver, BC

May 2020

KEY SKILLS

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

PROJECTS

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 video frames to the server where a machine learning algorithm locates the head and extrapolates this data. The 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.- A prototype of a real vending machine remotely secured by the android app. The vending machine scans the id and compares it 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 the 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 the app and DB

Smart Secure Door System "HERON"

Feb 2018 – Apr 2018

- Group project.- A 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, which was later uploaded on the Arduino.

EXPERIENCE

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

University of British Columbia

Vancouver BC, Canada

Vantage Peer Mentor

Oct 2017 - Apr 2018

- Volunteered as a mentor, supporting new international students at UBC. My duties were the following:
- Organized events to support students either by experience or by referring them to the appropriate counseling
- 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

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 an 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

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