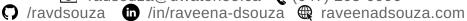
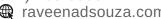
RAVEENA D'SOUZA

radsouza@uwaterloo.ca 🕻 (647) 205-0990





RELEVANT EXPERIENCE

Software Developer | Flynn Group of Companies

C#, .NET, Xamarin, SQL, Swagger, Quartz .NET

Jan - Apr 2018

- Developed a web application through Agile methodologies to interact and modify an ERP database with an integrated API and job scheduler
- Created scripts to generate geocodes for 120k addresses and tax information for past projects using Google Maps and Avalara Tax APIs
- Designed automated tests using the Xamarin test cloud for a cross-platform mobile app used to maintain employee time logs and company contracts

Automation Developer | Industry 4.0 Lab

PLCs, C#, AutoCAD

May 2017 - Present

- Developed PLC logic for the automation of a mini-factory and C# interface to control the flow of products (modelled by RFID chips)
- Designed detailed blueprints of the factory using AutoCAD

Research Assistant | Engineering Ideas Clinic

C++, SolidWorks, Excel, VBA

May - Aug 2017

- ◆ Modelled several two-axis arms on SolidWorks and built them with aluminum extrusions and pneumatics with an Arduino interface
- Utilized Excel and VBA to analyse the flow and efficiency of a scaled-down model factory using RFID chips as production line objects

PROJECTS

Toaster Printer | Hack the North 2017

Python, Arduino, hardware

Sep 2017

 Designed a circuit with components from a toaster to create a 12x12 grid of heating elements to toast images onto bread and controlled with Arduino

ATM Robot

ROBOTC (C based language), sensors

Oct - Dec 2016

◆ Utilized various sensors (colour, ultrasonic, touch) for an ATM robot that supported accounts, withdrawals, deposits, and counterfeit recognition

VR Personal Assistant | WearHacks 2017

Unity, C#, Myo gesture control armband

Mar 2017

Developed a VR personal assistant for the Myo armband with Unity and C# that supports features such as notes, health, calendar, and reminders

Vulcademy | Hack the Valley 2018 | Won Best Design prize

JavaScript, Node.js, MongoDB

Feb 2018

- Created a web app with features such as audio recording, polls, and Q&A
- ♦ Stored profile data and previous lecture logs on MongoDB to display chronological information on student and professor dashboards

Pet Store

Python, Pygame

Mav - Jun 2015

◆ Developed and tested a virtual store for buying and selling pet accessories

LANGUAGES

- ♠ C
- **◆** C#
- ◆ C++
- JavaScript
- Python
- Java
- ◆ SQL
- Visual Basic

TOOLS

- AutoCAD
- SolidWorks
- Arduino
- GD&T
- Git
- Unitv
- Xamarin
- Visual Studio

EDUCATION

- Bachelor of Applied Science **Mechatronics Engineering** University of Waterloo Sep '16 – Apr '21 (expected)
- Courses: Sensors and Instrumentation, Computer Structures and Real-Time Systems (C, ARM Cortex-M), **Linear Circuits**

INVOLVEMENTS

- Volunteer at the UW Electric Vehicle Challenge and Intl. Autonomous **Robot Racing Competition**
- Awarded first place for wesbite design contest at Hack the North
- Eng. Society Class Rep. for Fall 2017 and Spring 2018
- Communications Director and Shadow Day Manager for the Eng. Ambassadors
- Tutor at Kumon Centre for Math and Reading for 2 yrs

INTERESTS

- Ultimate Frisbee player
- Badminton Club member
- Hackathon lover
- Eng. outreach volunteer
- Knitting enthusiast