# **Adrian Malaran**

Mechatronics Engineering | PROGRAM www.adrianmalaran.me | WEBSITE (905) 749-1916 | PHONE adrian.malaran@uwaterloo.ca | EMAIL 4 MONTHS | TERM

#### **TECHNICAL SKILLS**

- Software Languages/Frameworks: JavaScript | Python | Django | Java | C++ |HTML5 | CSS | LESS | Bootstrap | jQuery | AngularJS | ROBOT-C | MySQL | PostgreSQL | Cassandra | AJAX | JSON | C#
- Mechanical Design: SolidWorks | AutoCAD | CNC Machine | CO2 Laser | 3D Printer
- Software Environments: Android Studio | GitHub | Unity
- Operating Systems: Linux | Windows

# **ENGINEERING EXPERIENCE**

Back-end Developer Sept 2016-Dec 2016

BlackBerry - Waterloo, Ontario

- Designed and improved software infrastructure of an intricate 6 node cloud-based data storage system supporting multiple BlackBerry apps for millions of clients
- Architected an alternative data relay method to remove database complexities, resulting in speed increases of 400% for select features
- Implemented PostgreSQL compatibility to pre-existing system to complement software functionality
- Developed internal APIs between separate system nodes to enhance security and data relay
- Constructed test scripts and analytical metrics to ensure system stability and detailed production reports

Full-stack Developer Jan 2016-Apr 2016

**BroadConnect Telecom** - Toronto, Ontario

- Developed and improved features on enterprise level software to increase versatility in program functionality
- Implemented the use of WebSockets to emulate real time server reaction towards incoming data
- Imbedded the use of REST APIs (Twilio/Facebook) to develop more intuitive and interactive features on the software platform
- Assembled a promotional website using Django and Bootstrap (HTML/CSS) for company products used for marketing towards high level corporations

# **PROJECTS**

# WhereToEat (Android App)

• Currently developing a personalized application that relays close by food places extracted from the Yelp API to provide suggestions on places to eat, tailored to the preferences of the specific user

## TrakRecord (Android App) | Toronto WearHacks 2016 SickKids Foundation Challenge Winners

• Developed an android application using Java in calibration with external positional beacons that delivers real-time meaningful data to a user in a marathon setting

#### Web Based Messaging App

• Devised a web application that enables a user to message phone numbers from a web based graphical user interface; developed using Twilio, HTML5, CSS, Python, Django, Angular, Gulp, AJAX, JSON, LESS

## COSMOS Game App | Game Design Competition

· Programmed game element algorithms to introduce complexity and challenge to create a more fulfilling user experience

#### Personal Website ( www.adrianmalaran.me )

Architected a full personal website using HTML, CSS and AngularJS

#### Mars Rover Design Team | University of Waterloo

Aided in the creation of the rover's chassis through fabrication of parts using a lathe, mill and band saw

#### **Ukulele Tuner**

• Programmed the system using ROBOT-C to independently interpret the pitch and engage the mechanical components accordingly to adjust the tension in the strings to the correct pitch

#### OTHER EXPERIENCE

# Back-Up Dancer July 2014, August 2015

The Filipino Channel (TFC)

Collaborated, organized and choreographed with various international celebrities for concert showcases

#### **EDUCATION**

#### UNIVERSITY OF WATERLOO

- Currently ranked 19<sup>th</sup> out of 93 in the class
- President's Scholarship of Distinction (Awarded to Applicants with a 95%+ Average)