




# LUISA ROJAS G.

## COMPUTER SCIENTIST

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### SKILLS

#### Programming

C, C++, Java, Python

#### Databases

PostgreSQL, NoSQL, MongoDB,  
Neo4J

#### Web Development

jQuery, NodeJS, Flask, HTML, CSS,  
Bootstrap

#### DevOps

Git, GitHub, Docker

#### Machine Learning

Keras, TensorFlow

#### Source Code Instrumentation

TXL

### LEADERSHIP

#### Director of Graduate Studies

November 2018 – Present

#### Ontario Tech Student Union

The Board of Directors is the governing body of the Student Union. It is comprised of students from each faculty, who are to make sure that all decisions made by the organization are in the best interest of its membership.

#### Founding Chair

September 2016 – December 2018

#### Ontario Tech ACM-W Chapter

- Provided academic and professional support to students in all STEM programs at the university.
- Held regular events and workshops as opportunities for networking, mentoring between new and senior students.
- As a women's ACM chapter, we actively advocated for minority groups in STEM fields.

### EDUCATION

#### MSc in Computer Science

September 2017 – November 2019 (expected)

University of Ontario Institute of Technology

Thesis: Automatic localization of concurrent faults.

#### BSc in Computer Science (Honours)

September 2013 – April 2017

University of Ontario Institute of Technology

### EXPERIENCE

#### Teaching Assistant

January 2017 – Present

University of Ontario Institute of Technology

Faculty of Science

- Guided junior and senior Computer Science students through the course material in order to successfully complete their weekly (or bi-weekly) assignments and exams.
- Thoroughly explained challenging topics previously covered during the lecture sections.
- Provided feedback on how to improve the design and implementation of their solutions.
- I have taken on this role of the following courses at Ontario Tech:
  - Programming Workshop (C++)
  - Software Quality Assurance (C++, Java)
  - Web Development (JavaScript, MongoDB)

#### System Administrator

May 2014 – December 2014

University of Ontario Institute of Technology

International Office

- Designed and maintained the International Office website.
- Oversaw the international students' University Health Plan (UHIP) program, which covers 25% of the student population.
- Aided in the planning and marketing processes for various events held for international and exchange students.

## PROJECTS

### Mentor-Mentee Matching System

February 2018 – April 2018

Designed and implemented a web-based platform for a matching system between mentors and mentees for the Peer Mentorship Program at Ontario Tech. Given a set of survey answers by potential mentors and first year students, our system matches them by faculty according to their compatibility. It outputs the results in an Excel sheet for convenience and stores them internally for visualization and future use.

CSS Docker HTML JavaScript Neo4J PostgreSQL Python

### Distracted Driver Detection

December 2017

Trained a deep Convoluted Neural Network (CNN) to predict with 99.4% accuracy whether an individual is distracted-driving as well as what type of distraction is involved. The VGG16 CNN model, pre-trained on ImageNet, is coupled with a retrained fully-connected model and tested on previously unseen distracted driver images.

Keras Jupyter Notebooks Python TensorFlow

### Threaded Paws

October 2016 – October 2017

As part of my undergraduate thesis project, I designed and developed a serious game that can assist students in learning different concurrency concepts and pit falls, such as thread interleavings, data races, starvation and deadlocks. Threaded Paws was designed for second to fourth year Computer Science and Software Engineering university students at the undergraduate level; it will be used in the classroom for the first time in September 2019.

C# Unity Game Engine

### dynOBD

October 2016 – December 2016

Android mobile application that records and keeps track of statistics about any given car trip. It uses a Bluetooth connection to the vehicle in order to provide live data to the user, such as current speed, throttle, trip origin, destination, and time. This information is stored locally for future reference.

Android Studio Java

## LANGUAGES

English (Fluent), Spanish (Native), French (Basic)