

Luisa Rojas

MSc Computer Science Student

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EDUCATION (3)

MSc Computer Science at University of Ontario Institute of Technology

September 2017 - Graduating August 2019

[csci6100g - advanced topics in software design](#) [csci5010g - survey of computer science research topics and methods](#)

BSc Computer Science (Honours) at University of Ontario Institute of Technology

September 2013 - April 2017

[csci3030u - database systems and concepts](#) [csci4030u - big data analytics](#) [csci4020u - compilers](#) [csci3020u - operating systems](#) [csci2040u - software design and analysis](#)
[csci3070u - design and analysis of algorithms](#) [csci3230u - web application development](#) [csci4100u - mobile devices](#)

Highschool, Middle School, Elementary School at Colegio Santa Francisca Romana

August 1999 - June 2013

SKILLS

Web Development

Master

[html](#) [css](#) [javascript](#) [jquery](#)
[nodejs](#)

Database Management

Master

[sql](#) [nosql](#)

Mobile Development

Intermediate

[android - java](#) [swift](#)

Master

[c](#) [c#](#) [c++](#) [python](#) [java](#)

Beginner

[clojure](#) [scala](#)

WORK EXPERIENCE (4)

Teaching Assistant at University of Ontario Institute of Technology

September 2017 - December 2017

<https://science.uoit.ca/>

This is a first intensive course on computer programming that covers both theory and practice. The lectures introduce modern concepts in program design and construction along with features of modern object-oriented programming languages. The laboratories provide an opportunity to apply these concepts to practical programming problems. Topics that are covered in this course include program design, problem solving strategies, program documentation, memory management and object-oriented program design.

- Prepare all 3-hour laboratory sections assigned.
- Deliver and present the students with the relevant content pertaining the current laboratory project.
- Provide availability for office hours and drop-in for questions or concerns from students.
- Mark laboratories, midterms and final exams handed in.

Teaching Assistant at University of Ontario Institute of Technology

January 2017 - April 2017

<https://science.uoit.ca/>

CSCI1061, Programming Workshops II, is a second intensive course on computer programming (C++) that continues from CSCI 1060U and covers more advanced theory and practice. The lectures introduce modern concepts in program design and construction for larger scale programs and the laboratories provide an opportunity to apply these concepts. Topics that are covered in this course include advanced program design, design patterns, program refactoring, templates and standard template libraries, data structures, debugging and version control.

Tasks and responsibilities include all outlined above.

System Administrator at University of Ontario Institute of Technology

September 2014 - December 2014

<https://international.uoit.ca/international-office/>

The International Office, within the Office of the Vice-President, Research, Innovation and International, provides overall co-ordination of internationalization at UOIT, including strategic planning, faculty engagement and policy development. Operationally, the International office provides support for student exchange, visiting scholars, faculty mobility, and international partnership and program development.

In addition to the tasks outlined below as Assisstant System Administrator, my responsibilities included:

- Administrator of health insurance for all international students (UHIP)
- Responsible for the production of events, from conception through completion.

Assistant System Administrator at University of Ontario Institute of Technology

May 2014 - August 2014

<https://international.uoit.ca/international-office/>

The International Office, within the Office of the Vice-President, Research, Innovation and International, provides overall co-ordination of internationalization at UOIT, including strategic planning, faculty engagement and policy development. Operationally, the International office provides support for student exchange, visiting scholars, faculty mobility, and international partnership and program development.

- Elaboration of invitation letters for international visiting scholars interested in conducting research at the university.
- Design of posters and flyers for advertisement purposes utilizing various graphics software
- Creation and administration of forms for international visitors (scholars, delegations, partners), international, exchange, Science Without Borders students, among others.

- Control of the International webpages under the UOIT website.
- Contacting connections and setting up meetings.

PROJECTS (6)

Threaded Paws

April 2017

Designed and developed a serious game that can assist students in learning and understanding different concurrency concepts that can be problematic and hard to grasp by using a different approach.

Threaded Paws is the first serious game targeting concurrency that we are aware of. There are very few game-based tools that focus on advanced programming concepts available. That being the case, Threaded Paws could set path and serve as guide for more games focused on complex topics in Computer Science to be developed in the future.

dynOBD

December 2016

Android application to keep track of statistics about any given car trip. It uses Bluetooth to connect to an OBDII (On-Board Diagnostics) device that is connected by the user to the car's DLC (Data Link Connector). It also provides a live data feed showing the current speed and throttle of the car.

Graphizzer

December 2016

Web-based application that, using the popular DOT notation, generates an accurate visualization by retrieving its image using the imgur API.

Simulated Banking System

April 2016

Designed and implemented a Banking System in the form of a console application, following various software quality control aspects in the context of the Extreme Programming Process Model. The project uses a C++ automated teller machine terminal for simple banking transactions, while a Java batch processor maintains and updates the master account file in the back end.

A-Priori and PCY Implementations

April 2016

Conducted market-basket analysis by developing various efficient frequent itemsets algorithms on retail datasets. The algorithms were analysed and then compared in relation to their corresponding run times.

CPU Capacity Comparisson

April 2015

Determined the optimal amount of threads for specific mathematical calculations in relation to the number of iterations, magnitude of estimation error and CPU capacity.

EXTRACURRICULAR ACTIVITIES (7)

Vice-President of Marketing and Design at UOIT Science Council

September 2016 - April 2017

- Design of posters, flyers and banners to advertise upcoming events and meetings.
- Creation, management and maintenance of the website.

Founding Chair at UOIT ACM-W Student Chapter

September 2016 - December 2016

Principal officer; responsible for leading the Chapter and managing its activities in accordance with the mission of ACM-W, the policies and procedures of the ACM. Presides at all meetings of the Chapter and prepares the Chapter's final report each year.

Secretary at ASME UOIT Chapter

September 2015 - April 2016

In addition to the tasks outlined below as Webmaster, my responsibilities included:

- Manage all general and executive meetings logistics, attend and record minutes.
- Direct activities related to annual events on and off campus.
- Maintain club documents and records.

Webmaster and Social Media Director at ASME UOIT Chapter

September 2014 - August 2015

At UOIT's American Association of Mechanical Engineering Student Chapter, my tasks included:

- Create and manage the club website.
- Assist on the planning and elaboration of events and advertisement of the club.
- Contact club members and coordinate meetings.