Luisa Rojas

MSc Computer Science Student

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EDUCATION (2)

MSc Computer Science at University of Ontario Institute of Technology

September 2017 - Graduating August 2019

csci6100 - advanced topics in software design | csci5010 - survey of computer science research topics and methods

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

September 2013 - April 2017

csci3030 - database systems and concepts | csci4030 - big data analytics | csci4020 - compilers | csci3020 - operating systems | csci2040 - software design and analysis | csci3070 - design and analysis of algorithms | csci3230 - web application development | csci4100 - mobile devices

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 (3)

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.

Job tasks include all listed previously.

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.

- 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.

System Administrator at University of Ontario Institute of Technology

September 2014 - December 2014

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

The International Office.

Job tasks include all listed previously and the following:

- 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.

EXTRACURRICULAR ACTIVITIES

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

Job tasks include all below and the following:

- 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

- 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.

PROJECTS

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.

LANGUAGES

English
Fluent

Spanish
Native speaker

French
Intermediate