

Ralph Sarkis

COMPUTER SKILLS

- Proficient in Python, C, Javascript and \LaTeX
- Object Oriented Programming in BASIC
- Website design in HTML5, CSS3, PHP and MySQL
- Basic knowledge in Arduino, OCaml, Java and Bash

WORK EXPERIENCE

Research Assistant **May 2018 - August 2018**
McGill University

- Supervised by Professor Hatami
- Received a grant from NSERC
- Worked on finding the complexity of the rank median problem for three genomes

Achievement: *Showed that the rank median problem is NP-complete.*

Grader **October 2017 - December 2017**
McGill University

- Graded assignments for an introduction to Abstract Algebra class (MATH 235)

Instructor **July 2017**
Digital Media Academy (DMA) *(Multimedia focused summer camp)*

- Prepared and gave lectures for programming classes (*Game design* and *Electronics with Arduino* for 8-12 years old, *Computer science* for 13-17 years old)
- Helped the student finish their own projects

Intern in a nanophotonics lab **April – May 2016**
Institut National de la Recherche Scientifique (INRS-EMT)

Objective: *Improve the electrochemical etching procedure for silver tips.*

- Replicated experiments while measuring and modifying different variables
- Produced weekly reports to present the experiment results
- Compiled a final internship report and presented it to a non-scientific audience (Grade received 99%)

Supervisor at a Fab lab **March 2015 – April 2016**
Collégial international Sainte-Anne (CiSA)

- Assisted students on the use various lab machines (3D printer, drone, MIDI pad controller)
- Liven the laboratory up in innovative ways to improve the user experience

Achievement: *Increased the attendance level from 3 regular users to 15.*

Teaching Assistant **July 2015**
Digital Media Academy (DMA)

- Helped the teacher to prepare and lead 2 programming classes (*Game design* and *Minecraft modding*)
- Supported the students (8-12 years old) when learning concepts from the class
- Facilitated the extracurricular activities

Physics and chemistry project (203-NYA, 202-NYB) **September 2014 – April 2015**
Collégial international Sainte-Anne (CiSA)

Objective: *Build an automaton that recycles used oils into biodiesel.*

- Learned and analyzed the industrial process.
- Designed and assembled the piping
- Automated the machine with an Arduino microprocessor and other electronic components

EDUCATION

Joint Honours in Math and Computer Science McGill University	August 2016 – Expected April 2019 Montreal, QC
Bilingual DEC in pure and applied sciences Collégial international Sainte-Anne (CiSA)	2016 Lachine, QC