

Ralph Sarkis
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ralphs16.github.io

WORK EXPERIENCE

Research Intern April – July 2020
LIP (ENS de Lyon)

- Supervised by Matteo Mio and Valeria Vignudelli
- Worked on algebraic presentations for different monads modelling nondeterministic and probabilistic choices with termination

Achievement: Submitted a paper to FoSSaCS 2021 (see preprint [here](#)).

Teaching Assistant September – December 2018
McGill University

- Course: *Theory of Computation* taught by Prof. Prakash Panangaden
- Held weekly office hours to help students with the course material and homeworks
- Graded assignments and midterm

Research Intern May – August 2018
McGill University

- Supervised by Prof. Hamed Hatami
- Received a grant from NSERC and supplement from FRQNT (CAD\$8500 total)
- Worked on the complexity of the rank median problem for permutations and genomes

Grader October – 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

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

EDUCATION

Theoretical Computer Science (Master) August 2019 – Expected June 2021
ENS de Lyon Lyon, France

Joint Honours in Math and Computer Science (BSc) August 2016 – April 2019
McGill University Montreal, QC

PROGRAMMING EXPERTISE

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