

Paul-Aymeric McRae

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EDUCATION

MCGILL UNIVERSITY
BSc, HONOURS PHYSICS &
COMPUTER SCIENCE
June 2020 | Montréal, QC
Faculty of Science
Cum. GPA: 3.97 / 4.0

HOLLIS BROOKLINE HIGH SCHOOL

June 2016 | Hollis, NH

LINKS

LinkedIn:// aymeric-mcrae
Github:// aymeric-mcrae

COURSEWORK

GRADUATE LEVEL

Physics-Based Animation
Game Design & Algorithms
Nuclear & Particle Physics
Astrophysics & Relativity

UNDERGRADUATE LEVEL

Quantum & Statistical Mechanics
Algorithms & Data Structures
Numerical Methods
Computer Architecture
Software Design Techniques & Patterns
Unix Tools & Scripting
Discrete Mathematics
Electromagnetism
Calculus & Differential Equations

SKILLS

PROGRAMMING

Languages
Java • Python • C • C# • C++
OCaml • MATLAB • Script (Bash)
L^AT_EX • SQL • JavaScript
Software & Tools
Unity3D • Eclipse • Visual Studio
Jupyter Notebook • JUnit • UML
Operating Systems
Linux • Windows

SCIENCE

Report Writing • Data Collection &
Analysis • Problem Solving

LANGUAGES

Native Speaker
English • French
Conversational
Spanish

WORK EXPERIENCE

L'ESCRIME LIBRE | Co-FOUNDER

July 2020 – Present | Montréal, QC

- Co-founded startup which will design, develop, and sell fencing equipment.
- Internally managed team and communicated with advisors and investors.
- Designed circuit with sensors in wireless scoring system.
- Member of software team which is developing a companion iOS/Android app.

MCGILL PHONATHON | TEAM LEADER

June 2019 - May 2020 | Montréal, QC

- Supervised student callers at McGill Phonathon (fundraising call centre).
- Maintained Excel databases of per-shift statistics.
- Communicated with team to maintain positive working atmosphere.
- Taught trainees to use software and equipment and to master fundraising.

MCGILL PHONATHON | COMMUNICATIONS ASSISTANT

June 2018 – June 2019 | Montréal, QC

- Called McGill alumni to raise funds for on-campus programs.
- Maintained good relations with alumni community.

OXFORD LEARNING CENTRE | TUTOR

July 2018 – Aug 2018 | Montréal, QC

- Tutored children of all ages in French, English, science and mathematics.
- Tracked students' progress and identified areas of improvement.

SAINT-GOBAIN PERFORMANCE PLASTICS | CODING PROJECT

June 2018 - Aug 2018 | Merrimack, NH

- Developed an app to automate data processing tasks performed by R&D.
- App was written using Python scripts, then "frozen" into an executable.
- Met with R&D head to modify functionalities as desired.

RESEARCH EXPERIENCE

MILA | RESEARCH INTERN

September 2020 – Present | Montréal, QC

- Worked in the **Chandar Lab** at Machine Learning institute Mila.
- Research focused on optimizing learning parameters in Recurrent Neural Networks.

MCGILL QUANTUM NANO ELECTRONICS LAB | RESEARCHER

May 2019 – Present | Montréal, QC

Worked under **Prof. Michael Hilke** on two projects:

- Use of machine learning assisted with quantum computing on multiple problems, including conductivity of solids and COVID-19 propagation.
- Synthesis and analysis of graphene (monolayer carbon crystal) in Möbius and other 2-dimensional but non-planar geometries.

AWARDS

May 2020	Top 10%	Dean's Honour List (Graduation)
August 2019	Top 10%	Dean's Honour List
August 2017	Top 10%	Dean's Honour List
2016-2020	Renewable yearly	Hugh Brock Scholarship