# Ayoub El Hanchi

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 $\begin{array}{c} {\rm https://aelhanchi.github.io/} \\ +1\text{-}514\text{-}775\text{-}9728 \end{array}$ 

#### Education

## McGill University

Montreal, QC

M.Sc. Mathematics and Statistics

May 2019 - April 2021

- Supervisor: David A. Stephens

- Thesis: Large Scale Optimization and Sampling for Machine Learning and Statistics.

Relevant Coursework: Mathematical Foundations of Machine Learning, Reinforcement Learning,
 Probabilistic Graphical Models, Applied Machine Learning.

# McGill University

Montreal, QC

B.Sc. Joint Honours Mathematics and Computer Science

September 2016 - April 2019

- GPA: 3.86/4.0

- Graduated with First Class Honours.

### **Conference Publications**

Adaptive Importance Sampling for Finite-Sum Optimization and Sampling with Decreasing Step-Sizes. **Ayoub El Hanchi**, David A. Stephens

Advances in Neural Information Processing Systems (NeurIPS), 2020.

# **Preprints**

Stochastic Reweighted Gradient Descent.

Ayoub El Hanchi, David A. Stephens

Preprint, available on Arxiv.

A Lyapunov Analysis of Loopless SARAH.

Ayoub El Hanchi

Preprint, available on my website.

### Skills

**Languages:** English · French · Arabic

Programming Languages: Python  $\cdot$  R  $\cdot$  C++  $\cdot$  Bash Software Tools: Pytorch  $\cdot$  Jax  $\cdot$  Numpy  $\cdot$  Pybind11  $\cdot$  Git

#### **Awards**

### Departmental Entrance Scholarship

March 2021

Department of Computer Science, University of Toronto

## Science Undergraduate Research Award

Faculty of Science, McGill University

May 2018