

Education

- 2019–... **Ph.D. in Computer Science.**
Université Laval, Quebec.
- 2018–2019 **M.Sc. in Computer Science.**
Université Laval, Quebec. GPA: 4.33/4.33
- 2015–2018 **B.Sc. with Honors in Mathematics and Computer Science.**
Université Laval, Quebec. GPA: 4.16/4.33

Professional experience

- 2018–... **Applied Research Scientist, InVivo AI, Montreal.**
Research and develop machine learning solutions to streamline small molecule R&D.
- Fall 2018 **Research Intern, Inria, Lille.**
PAC-Bayesian theory for random Fourier features and neural networks.
- 2016–2018 **Research Assistant, GRAAL Research Lab, Université Laval, Quebec.**
Participate in machine learning and computational biology research.
- Summer 2017 **Research Intern in Machine Learning, CerebriAI, Toronto.**
Deep reinforcement learning on real-time enterprise data.
- Summer 2016 **Research Intern, GRAAL Research Lab, Université Laval, Quebec.**
Design, implement and run machine learning algorithms on genomic data.

Peer-Reviewed Publications

- 2019 **Pseudo-Bayesian Learning with Kernel Fourier Transform as Prior,** Gaël Letarte, Emilie Morvant, Pascal Germain.
Aistats, accepted
- 2019 **Interpretable genotype-to-phenotype classifiers with performance guarantees,** Alexandre Drouin, Gaël Letarte, Frédéric Raymond, Mario Marchand, Jacques Corbeil, François Laviolette.
Scientific reports, 9(1), p.4071
- 2018 **Importance of Self-Attention for Sentiment Analysis,** Gaël Letarte, Frédéric Paradis, Philippe Giguère, François Laviolette.
BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP Workshop, EMNLP
- 2016 **Large scale modeling of antimicrobial resistance with interpretable classifiers,** Alexandre Drouin, Frédéric Raymond, Gaël Letarte, Mario Marchand, Jacques Corbeil, François Laviolette.
Machine Learning for Health Workshop, NIPS

Grants and Scholarships

- 2019–2022 **Natural Sciences and Engineering Research Council of Canada.**
Alexander Graham Bell Canada Doctoral Scholarship
- 2019–2020 **Fonds de recherche du Québec - Nature et technologies.**
B1 Masters Research Award
- Fall 2018 **Mitacs.**
Globalink Research Award
- 2018–2019 **Natural Sciences and Engineering Research Council of Canada.**
Alexander Graham Bell Canada Masters Scholarship
- Summer 2017 **The Fields Institute for Research in Mathematical Sciences.**
Fields Undergraduate Summer Research Program
- Summer 2016 **Natural Sciences and Engineering Research Council of Canada.**
Undergraduate Student Research Award

Applications

- 2016 **Kover**, *Languages: Python & C++*, <http://github.com/aladro61/kover>.
Tool allowing to learn interpretable computational phenotyping models from k-merized genomic data.

Awards

- 2016-2017 **Honors Roll**, *Department of Mathematics and Statistics*, Université Laval.
- 2017 **Yves-Roy Award**, *Best Oriented-Object Project*.
Member of the winning team
- 2015-2016 **Honors Roll**, *Department of Mathematics and Statistics*, Université Laval.

Languages

- Bilingual french/english
- Basic knowledge of German

Programming skills

- | | | |
|----------|----------------|-----------------------------------|
| ○ C/C++ | ○ PyTorch | ○ L ^A T _E X |
| ○ Python | ○ Scikit-Learn | ○ AWS |

Interests

- | | |
|------------------------|-------------------------|
| ○ Machine Learning | ○ Robotics |
| ○ Parallel programming | ○ Software Development |
| ○ Big Data | ○ Computational Biology |
| ○ Algorithms | ○ Mathematics |