Rémi Le Priol

PhD Candidate

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Education

- 2018–2021 **Ph.D. Computer Science**, *Université de Montréal*, MILA. Working on optimization, structured prediction and generative models under the supervision of Simon Lacoste-Julien.
- 2016–2017 **M.Sc. Mathematics, Vision, Machine Learning**, *ENS Cachan*. France's top master for computer vision, statistical learning and artificial intelligence.
- 2013–2017 **Engineering degree and M.Sc. Applied Maths**, *École polytechnique*. One of France's leading universities for high-level multidisciplinary scientific studies. Degree to be awarded in late 2017. Data Science track. 'A' grades in Statistics, Algorithmic, Statistical Physics, Statistical Learning, Signal Processing.
- 2011–2013 Admission to École polytechnique, *Lycée Hoche*, Versailles.

 Two-year intensive programme in Mathematics, Physics and Computer Science in preparation for competitive examinations to the French Grandes Écoles for scientific studies.
 - 2011 **Baccalauréat in Science**, *Lycée Rabelais*, Meudon. French secondary school diploma, awarded with Highest Honors

Experience

- 2017 **Visiting Researcher**, *Montreal Institute for Learning Algorithms*, Prof. Simon Lacoste-Julien, 8 months.
 - Study and application of the Stochastic Dual Coordinate Ascent algorithm on structured prediction problems, at the intersection of optimization and machine learning.
- 2016 **Visiting Researcher**, *New York Genome Center*, 4 months.

 Analysis of non-determinism in the aligner BWA-MEM and on the parallelization of Small Variants Callers, in particular Haplotype Caller. Distributed computing with Hadoop.
- 2015 **Programmer**, *Crédit Agricole*, *Corporate and Investment Bank*, Tokyo, 2 months.
 - Intern in the Nonlinear Trading Desk. VBA-Excel implementation of a price and risks backtesting algorithm for exotic products using company's pricer and historical market data.

2013-2014 **Lieutenant**, Special Military Service Regiment of Reunion (RSMAR), Saint-Cyr Coëtquidan then La Réunion Island, 7 months.

After 4 months of training in the school for French Ground Forces officers Saint-Cyr Coëtquidan, I have been in charge of a month-long military training for a group of 30 disadvantaged young adults without schooling.

Projects

2015–2016 **Efficient Algorithms in Genomic**, *Polytechnique*, Prof. Yanlei Diao, 4 months.

In depth-study of the alignment algorithm BWA.

2014–2015 **Flapping wings drone in electrostrictive material**, *Polytechnique-Arkema*, Dr. Fabrice Domingues Dos Santos, 8 months.

Aerodynamical modelling, and experiments with a new material developed by the chemical company Arkema, in a team of 5.

2012–2013 **Implementation of DNA alignment algorithms in CAML**, *Lycée Hoche*, Prof. Philippe Chateaux, 8 months.

Focused on Smith-Waterman algorithm, and Hirschberg's Divide and Conquer variation. Defended at the competitive examinations for Grandes Ecoles.

Languages

- French (mother tongue)
- English (fluent)
- Spanish (intermediate)
- Japanese (Basic)

Miscellaneous

Skills Work experience with Java and Python scientific stack

Fun Climbing, hiking, biking, slackline & acroyoga enthusiast.