Yassine Laguel

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Education

2018–2021 **Phd in Optimization and Machine Learning**, *Supervised by Jérôme Malick, Université Grenoble Alpes*, Grenoble.

2017–2018 **Master of Sciences in Industial and Applied Mathematics (MSIAM)**,
Master 2, track Statistics, Grenoble.

2015–2018 **Ecole Nationnale Supérieure de l'Informatique et des Mathématiques Appliquée (ENSIMAG)**,
Engineering School, track Financial Engineering, Grenoble.

2012–2015 **Classes Préparatoires MPSI-MP***,
Lycée Blaise Pascal, Orsay, Option Computer Science.

2012 **Baccalauréat Option Sciences**,
Lycée Blaise Pascal, Orsay, High honors.

Scientific publications

2020 **On transconcavity and probability constraints**, Wim Van Ackooij, Yassine Laguel, Jérôme Malick, Guilherme Matiussi Ramalho, Wellington De Oliveira.
Submitted

2020 **Superquantile Minimization : Oracles and First-order Algorithms**, *Yassine Laguel, Jérôme Malick, Zaid Harchaoui*, Journal of Mathematical Analysis and Applications.
Submitted

2020 **Randomized Progressive Hedging methods for Multi-stage Stochastic Programming**, *Gilles Bareilles, Yassine Laguel, Dmitry Grishchenko, Franck Iutzeler, Jerome Malick*.
Submitted

2020 **Device Heterogeneity in Federated Learning : A Superquantile Approach**, *Yassine Laguel, Krishna Pillutla, Jérôme Malick, Zaid Harchaoui*.
Submitted

Scientific Talks and Poster

2019 **1st Order Methods for Minimization of Superquantile-based Risk Measures**, *Talk*, ICSP 2019.
Trondheim, Norway

2019 **On the interplay between generalized concavity and chance constraints**, *Talk*, ICCOPT 2019.
Berlin, Germany

2019 **Sur l'usage de la transconcavité pour les problèmes avec contraintes en probabilités**, *Talk*, Journées annuelles du GDR MOA 2019.
Rennes, France

2020 **Practical Minimization of CVar-based Risk functions**, *Talk*, ROADEF.
Montpellier, France

2020 **Handling Device Heterogeneity in Federated Learning**, *Poster*, Optimization for Machine Learning.
Marseille, France

Teaching Activities

2019-2020	**Convex and Distributed Optimization**, *Université Grenoble Alpes*, M2 MSIAM, Lecture Hall and Practical Work.
2019	**Introduction à Python**, *Université Grenoble Alpes*, M1 SSD, Lectures and Practical Work.
2019	**Optimization Numérique**, *ENSIMAG*, 2nd Year, Directed Studies and Practical Work.
2019	**MAP 201, Introduction à R**, *Université Grenoble Alpes*, L1, Practical Work.
2015-2017	**Mentor of undergraduate students in Mathematics**, *Université Joseph Fourier - CPP Grenoble*, Grenoble.

Work Experience

2018	**Research Internship**, *University of Washington*, Seattle.
	First order methods for Superquantile Regression
2017	**Research Internship**, *EDF R&D*, Saclay.
	On transconcavity and eventual convexity of Chance constrained problems.
2017	**Conception and implementation of a transport management algorithm for an international firm**, *Consulting for a french company*.
	Realization of an optimized algorithm for a transport network consisting of hundreds of sites and thousands of trucks.
2016	**Research Internship**, *WeSave, Financial Startup*, Paris.
	Research Internship in mathematical Finance, on the establishment of quantitative criterium based on correlations matrices to anticipate crises
2013	**Member of the Jury**, *ITYM*, IASI, Roumanie.
	Member of the Jury at the International Tournament of Young Mathematicians (ITYM).

Prizes

2012	**Finalist of the french tournament of young mathematicians (TFJM)** , *Saclay*, France.
	Rank : 1st ex-aequo
2012	**Finalist of the International Tournament of Young Mathematicians (ITYM)** , *Orsay*, France.
	Rank : 3rd

Computer Skills

Languages	PYTHON, JULIA, JAVA, C/C++, ADA, R, SQL, HTML/CSS, JAVASCRIPT, BASH, OCAML, LATEX
Operating Systems	Mac OS/X, Windows, Linux

Languages

French	Mother tongue
English	Advanced. Score TOEFL IBT : 93

Hobbies

- Olympic Mathematics, Music, Hiking