Radu-Alexandru Dragomir

EDUCATION AND ACADEMIC POSITIONS

Post-doctoral fellow, EPFL, Switzerland Nonconvex landscape of matrix factorization problems. Advised by Nicolas BOUMAL.	2022-now
Post-doctoral fellow, UCLouvain, Belgium Efficient methods for large-scale polynomial optimization. Advised by Yurii NESTEROV.	2021-2022
PhD student, Université Toulouse Capitole & ENS Paris Bregman first-order methods for relatively-smooth optimization. Advised by Jérôme BOLTE and Alexandre D'ASPREMONT.	2018-2021
MSc Mathematics, Vision, Learning (MVA), ENS Paris-Saclay Classes in Convex Optimization, Machine Learning, Statistics, Computer Vision.	2017-2018
Engineer's degree, Ecole polytechnique, Paris-Saclay Computer Science and Applied Mathematics, Machine Learning track.	2014-2017

WORK EXPERIENCE

Research assistant, University of California, Berkeley	Apr-Aug 2017
Using supervised learning for modeling and optimizing wind farm production.	
Collaboration with EDF Renewable Energy. Advised by Laurent EL GHAOUI.	
Intern, Symptify, Miami	Jun-Aug 2016
Front-end web development.	

PUBLICATIONS

- R.A. Dragomir, M. Even, H. Hendrikx. "Fast Stochastic Bregman Gradient Methods: Sharp Analysis and Variance Reduction", 2021. International Conference on Machine Learning.
- R.A. Dragomir, A.B. Taylor, A. d'Aspremont, J. Bolte. "Optimal Complexity and Certification of Bregman First-Order Methods", 2021. *Mathematical Programming.*
- R.A. Dragomir, A. d'Aspremont, J. Bolte. "Quartic First-Order Methods for Low Rank Minimization", 2021. Journal of Optimization Theory and Applications.

Scholarships and Awards

•	Prix Dodu: best presentation by a young researcher at SMAI-MODE workshop	2022
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• **AMX:** PhD fellowship

2018-2021

TEACHING

•	Teaching assistant, Continuous optimization, EPFL,	2022-2023
•	Lecturer, Numerical Analysis, L1, Université Paul Sabatier, Toulouse	2019-2020
•	Teaching assistant, Convex Optimization, M2, ENS Paris-Saclay	2018-2020
•	Lecturer, Linear Algebra, L1, Université Paul Sabatier, Toulouse	2018-2019

TALKS

•	SMAI-MODE workshop, Limoges. Gradient methods for quartic problems.	2022
•	Online presentation, University of Genova. Stochastic First-Order Methods for Relatively-Smooth Optimization.	2021

- SIERRA team seminar, Paris. Optimal Complexity and Certification of Bregman First-Order Methods. 2020
- ICCOPT, Berlin. Quartic First-Order Methods for Low Rank Minimization.

Reviewing

Mathematical Programming, Journal of Optimization Theory and Applications, Mathematics of Operations Research, Computational Optimization and Applications.

Computer skills	LANGUAGES	
• Advanced: Julia, Python, Matlab	• French: Native	
• Basic knowledge: C/C++, Javascript	• Romanian: Native	
	• English: Fluent (TOEFL score 112/120)	
	• Spanish: Working knowledge	

2019