Céline MOUCER

PhD student at INRIA Paris - PSL University

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🏠 *https://cmoucer.github.io*

EDUCATION

2021-	**INRIA/ENS Paris - SIERRA**, *PhD in Optimization and Machine Learning*, Paris, Convex optimization, first-order methods, computer-aided analysis, continuous-time models. *Supervisors :* Francis Bach, Adrien Taylor.
2020-2021	**Ecole des Ponts ParisTech**, *Master on national policies for sustainable development (MSPA-PDD)*, Paris, Part of the training for civil servants at French ministry for Environment.
2019-2020	**ENS Paris Saclay**, *Master of Science*, Paris, *Courses :* Convex optimization, Statistical Learning, Probabilistic Graphical Models, Kernel Methods, Theory of Deep learning.
2016-2020	**Ecole Polytechnique**, *One of France's top ranking universities for science and engineering*, Paris, (rank : 50/430), *Major coursework includes :* Operations Research, Monte Carlo Methods, ML.
2013–2016	**Lycée Louis le Grand**, *Preparatory Program MPSI-MP**, Paris.

WORK EXPERIENCE

2021 (6 months)	**Ministry of Economy (IGF, Bercy)**, *Paris*, Data Scientist Junior : evaluation of public policies and recommendations for decision making. Report : `https://www.economie.gouv.fr/cge/territoires`. *Supervisors* : Paul-Armand Veillon, Alice Schoenauer-Sebag.
2020 (6 months)	**Intern at Inria, équipe SIERRA**, *Paris*, Interplay between optimization and integration methods through worst-case analysis. *Supervisors* : Francis Bach, Adrien Taylor.
2019 (5 months)	**Intern at GERAD (Polytechnique Montréal)**, *Montréal, Canada*, A heuristic for language tight constraint in airline crew rostering. *Supervisors* : Issmael El Hallaoui, François Soumis.
2018	**Intern at EIFFAGE: new ELA4 launch complex for Ariane6**, *Toulouse*, (3 months).
2016–2017 (6 months)	**Officer Cadet in the Paris Fire Brigade**, *Paris*, Part of Polytechnique's first year curriculum - Managed a 3-person EMS vehicle team in emergency situations.

ARTICLES AND PROJECTS

2023	**A systematic approach to Lyapunov analyses of continuous-time models in convex optimization**, *C. Moucer, A. Taylor, F. Bach*, To appear in SIAM Journal on Optimization: `https://arxiv.org/abs/2205.12772`.
2022	**PEPit: computer-assisted worst-case analyses of first-order optimization methods in Python**, *B. Goujaud , C. Moucer, F. Glineur, J. Hendricks, A. Taylor, A. Dieuleveut*, Article : `https://arxiv.org/pdf/2201.04040.pdf`, Documentation for the python package (13k downloads): `https://pepit.readthedocs.io/en/latest/`.
2018	**Optimization of the Police's and Fire Brigade's call center**, *Préfecture de Police, Paris*, Drafted recommendations for the organization of the call center (Petri nets, statistical analysis).

OTHER EXPERIENCES

2023	**PEP Talks**, *Louvain-la-neuve*, Co-organiser of the first edition of a two-day workshop focused on Performance Estimation Problems (`https://performanceestimation.github.io/PEP-talks/february_2023/index.html`). 25 participants..
2022	**RJMI**, *Inria Paris*, Co- organiser of a two-day event at INRIA Paris showcasing mathematics and informatics to high-school girls (`https://filles-et-maths.fr/rjmi/`). 23 participants..
2021 - 2022	**Teaching assistant**, *Ecole des Ponts*, Introduction to optimization (Frédéric Meunier).

SKILLS AND OUTSIDE INTERESTS

IT	Python, R, Mathematica, Matlab, LateX
Language	French (native), English (C1, TOEFL 103), German (C1/C2, Voltaire Exchange Program 2011)
Volunteering	Protection Civile Paris Seine : Vice president in Paris 8-9, first-aid volunteering and marauding
Sports	Climbing, Running, Yoga