

Research Experience

- Feb. 2025 – **Post-doctoral Fellow in SIERRA team**, *Inria Paris*, Supervisor: Francis Bach
(currently) Analysis of sampling algorithms
- Oct. 2021 – **PhD in Applied Mathematics**, *Inria & CMAP, École polytechnique*, Supervisors:
Dec. 2024 Anne Auger and Nikolaus Hansen
Convergence analysis of Evolution Strategies with Covariance Matrix Adaptation (CMA-ES)
- Oct. 2020 – **Pre-doctoral Research Internship**, *McGill University, Montreal*, Supervisor: Tim
June 2021 Hoheisel
A note on the K-epigraph.
- April – Aug. **Research Internship (M2)**, *Inria Saclay - CMAP, École Polytechnique*, Supervisor:
2020 Anne Auger
Line search and learning rate influence on Evolution Strategies convergence.
- April – Aug. **Research Internship (M1)**, *University of Edinburgh*, Supervisor: Lukasz Szpruch
2019 Mean-field stochastic control and optimization.
- Feb. – June **Research Initiation Internship (L3)**, *CMLA, ENS Cachan*, Supervisor: Alain
2018 Durmus
Study of non-reversible MCMC methods.

Education

- 2019 – 2020 **Master's Degree (M2) in Mathematics, Vision, Learning (MVA)**, *ENS Paris-Saclay*
- 2018 – 2019 **Master's Degree (M1) in Mathematics and Applications**, *ENS Paris-Saclay / Université Paris-Saclay / École polytechnique*
- 2017 – 2018 **Bachelor's Degree (L3) in Mathematics**, *ENS Paris-Saclay*
- 2015 – 2017 **Preparatory Class MPSI-MP**, *Lycée Michelet, Vanves*
Equivalent to first two years of a Bachelor's Degree

Scientific Publications

Preprints

- Sept. 2024 *Irreducibility of nonsmooth state-space models with an application to CMA-ES*
Armand Gissler et al.
<https://hal.science/hal-04713675/>
- Feb. 2024 *On the irreducibility and convergence of a class of nonsmooth nonlinear state-space models on manifolds*
Armand Gissler et al.
<https://arxiv.org/pdf/2402.06447.pdf>

Journal Articles

- Apr. 2024 *Asymptotic estimations of a perturbed symmetric eigenproblem*, Applied Mathematics Letters
<https://inria.hal.science/hal-04386103v1/document>
- Sept. 2023 *A note on the K -epigraph*, Optimization
<https://arxiv.org/pdf/2107.00117.pdf>
- Oct. 2021 *Scaling-invariant functions versus positively homogeneous functions*, JOTA
<https://arxiv.org/abs/2101.03755>

Conference Proceedings

- July 2023 *Evaluation of the impact of various modifications to CMA-ES that facilitate its theoretical analysis*, GECCO 2023
https://hal.science/hal-04089923/file/evaluation2023author_version.pdf
- July 2022 *Learning Rate Adaptation by Line Search in Evolution Strategies with Recombination*, GECCO 2022
<https://inria.hal.science/hal-03644404/document>

Conferences and Seminars

- 2024 ISMP (Montreal), Dagstuhl Seminar, CMAP PhD Students Seminar (co-organization)
- 2023 JPS (Oléron), CJC-MA (Gif-sur-Yvette), BBOB Workshop (Lisbon), SIAM OP23 (Seattle)
- 2022 GECCO (Boston), Dagstuhl Seminar

Teaching

- 2021–2024 Teaching assistant, Bachelor of Science, École polytechnique – LAB 102: How to write mathematics (3 years)
- 2017–2018 Oral examiner, Lycée Michelet
- 2017–2018 Tutor, Institut Villebon-Charpak

Laboratory Life

- 2022–2024 Co-organizer, CMAP & CMLS PhD Seminar
- 2022–2024 Member, CMAP Laboratory Life Commission