Clément Bonet

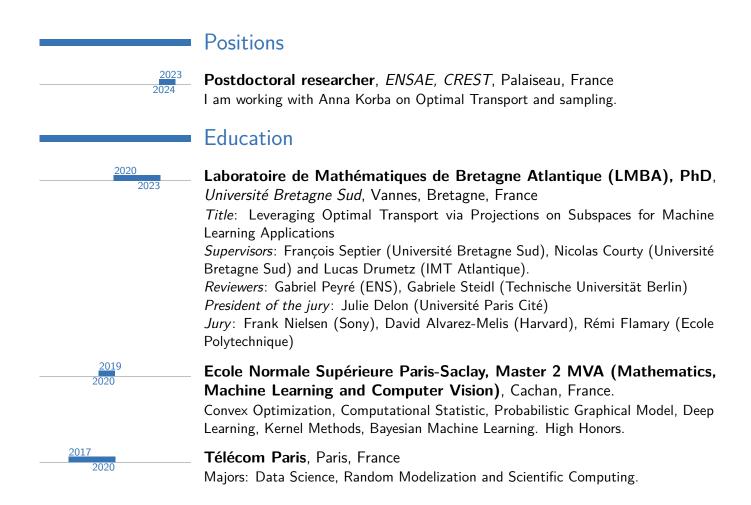
Curriculum Vitae

☑ clement.bonet@univ-ubs.fr

☐ https://clbonet.github.io

☐ clement-bonet-2840a9153

☐ clbonet



Publications

- [1] Clément Bonet, Paul Berg, Nicolas Courty, François Septier, Lucas Drumetz, and Minh-Tan Pham. "Spherical Sliced-Wasserstein". In: *International Conference on Learning Representations (ICLR)*. 2023.
- [2] Clément Bonet, Laetitia Chapel, Lucas Drumetz, and Nicolas Courty. "Hyperbolic Sliced-Wasserstein via Geodesic and Horospherical Projections". In: *Proceedings of 2nd Annual Workshop on Topology, Algebra, and Geometry in Machine Learning (TAG-ML)*. Vol. 221. Proceedings of Machine Learning Research. PMLR, 2023, pp. 334–370.
- [3] Clément Bonet, Benoît Malézieux, Alain Rakotomamonjy, Lucas Drumetz, Thomas Moreau, Matthieu Kowalski, and Nicolas Courty. "Sliced-Wasserstein on Symmetric Positive Definite Matrices for M/EEG Signals". In: *Proceedings of the 40th International Conference on Machine Learning (ICML)*. Vol. 202. Proceedings of Machine Learning Research. PMLR, 2023, pp. 2777–2805.
- [4] Guillaume Mahey, Laetitia Chapel, Gilles Gasso, Clément Bonet, and Nicolas Courty. "Fast Optimal Transport through Sliced Wasserstein Generalized Geodesics". In: *Advances in Neural Information Processing Systems* (NeurIPS). 2023.

- [5] Clément Bonet, Nicolas Courty, François Septier, and Lucas Drumetz. "Efficient Gradient Flows in Sliced-Wasserstein Space". In: *Transactions on Machine Learning Research (TMLR)* (2022).
- [6] Clément Bonet, Titouan Vayer, Nicolas Courty, François Septier, and Lucas Drumetz. "Subspace Detours Meet Gromov–Wasserstein". In: *Algorithms* 14.12 (2021), p. 366.

Preprints

[7] Thibault Séjourné, Clément Bonet, Kilian Fatras, Kimia Nadjahi, and Nicolas Courty. *Unbalanced Optimal Transport meets Sliced-Wasserstein*. **2023**.

Other Research Experiences

Reviews I have reviewed at different conferences: AISTATS2022,2023, ICML2022 (Outstanding Reviewer), ICML2023, Neurips2022, 2023, ICLR2024.

Open source Contributor to the Python Optimal Transport library: https://pythonot.github.io: I implemented the algorithm to solve the Wasserstein distance on the circle along with the Spherical Sliced-Wasserstein distance.

Talks

22/01/2024 Groupe de Travail (GdT) OT-PDE-ML, Institut de Mathématique d'Orsay.

08/01/2024 CREST Seminar, ENSAE.

03/07/2023 Conférence sur l'Apprentissage Automatique (CAp) 2023, Strasbourg.

13/12/2021 Spotlight poster at the Neurips Workshop Optimal Transport and Machine Learning (OTML).

18/11/2021 Groupement de Recherche (GDR), Information Signal Image Vision (ISIS), Optimal Transport and Machine Learning (OTML), Institut Henri Poincaré, Paris.

Professional Experiences

Teaching Assistant

Regression Model (L3), Université Bretagne Sud, Vannes, France

Linear Regression and Simulation Methods (L3), *Université Bretagne Sud*, Vannes, France

Mathematic Statistics (L3), Université Bretagne Sud, Vannes, France

Internships

2023

2022

2021

2020

2019

Research Internship, MAP5, Paris, France

Supervisors: Raphaël Lachièze-Rey, Pierre Latouche and Antoine Marchina.

Study of a subsampling algorithm using Gaussian Random Fields (https://github.com/clbonet/Internship-MVA).

Data Analyst Internship, *Sodexo Benefits & Rewards Services*, Ixelles, Bruxelles

Establishment analysis of VISA and MasterCard reimbursement data as part of the replacement affiliate scholarship.

2018

Web Development Internship, ZenyWay, Paris, France

I developed the frontend interface of ZenyPass, a password manager.

Languages

French Native Speaker

English 623/677 TOEFL ITP (Januarly 2019)

German Abitur in 2015

Skills

Programming Python ★★★☆☆ LateX ★★★☆☆

Basic R, Java, C, C++, SQL, HTML, CSS, Javascript.

Data Science Scikit-learn, Pytorch

Tools Git Program Version Control and Program Repositories.

OS Linux Daily use.