

Postdoctoral Position in Frugal Machine Learning, starting Fall 2025

- **Keywords** : frugality, large physics/biology-informed foundation models
- **Duration** : two years
- **Supervision** : Alexandre Allauzen, Paul Caillon
- **Location** : LAMSADE, 75016 Paris, France and PariSanté Campus, 75015 Paris, France

About

The MILES Team is opening a postdoctoral researcher position on frugality in Deep Learning models. Depending on the candidate background, potential topics of interest include (but are not limited to) fast and frugal adaptation, physics-informed foundation models for numerical simulation, data efficiency in training foundation models, theoretical guarantees of frugal deep learning. The targeted applications will depend on the skills of the candidate. They include NLP, speech processing, Physics or Biology.

The position is expected to start between October and December 2024. It is part of a French nationwide project on Frugality in AI (PEPR SHARP). The project involves many partners (ENS Lyon with the OCKHAM team, MLIA at Sorbonne Université, CEA List, IRISA at Rennes, École des Ponts ParisTech with the LIGM, the GENESIS INRIA team). The position includes the participation to the project (scientific meetings and collaboration nationwide). It can also involve the co-supervision of PhD students.

Qualifications

- Ph.D. in Computer Science, Mathematics, Statistics, Physics, Biology or any other associated discipline with a focus on computational method, optimization, machine learning, ...
- Strong publication record demonstrating advanced expertise in top conferences or journals in Machine Learning (ICML, NeurIPS, ICLR, ACL, AISTATS, JMLR, TMLR, ...) and/or other relevant fields.

Benefits

- Competitive salary, with options to additional teaching opportunities within Université PSL.
- Opportunities for collaboration with leading machine learning researchers in Paris region and beyond and to participate to the activities organised by the PRAIRIE-PSAI institute and PariSanté Campus.
- Support for professional development and attendance at conferences
- Be a part of the lively MILES team with weekly scientific seminars and talks, as well as many opportunities to build new collaboration.

Application

Interested candidates should submit **before August 22nd 2025** to alexandre.allauzen@dauphine.psl.eu, paul.caillon@dauphine.psl.eu, attaching the following :

- Curriculum Vitae (CV)
- Cover letter detailing research interests and relevant experience
- Choice of three representative publications (or preprints)
- Contact information for three references