



# 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, PariSanté Campus, or ESPCI, all in 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 (with Langevin institute) or Biology (with the Chemistry Biology Innovation institute)

The position is expected to start between October and December 2025. The candidate will join a dynamic team with strong collaborations with other partners depending on the project: the French nationwide project on Frugality in AI (PEPR SHARP), and/or the Langevin institute and the Chemistry Biology Innovation institute (both at ESPCI–PSL). The position therefore includes the participation to project meetings and the co-supervision of Master and 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.
- Opportunites 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