

# Efficiency and Frugality for Deep Neural Networks

## a PostDoc call

### Overview

**Deep Neural Networks** can solve extremely challenging tasks thanks to complex stacks of layers with thousands of neurons, especially in solving computer vision-related tasks. Recently, aspects like **frugal AI** and **efficiency** are receiving major attention: how can we **improve** the deep models **learning** strategy? Do we really need all this complexity to solve tasks with deep learning? Is the energy spent at training time irrelevant? Can we deploy **tiny ML** effectively? In this postdoc call, these and many other aspects will be explored, in between theory and application. Many tasks related to frugal AI are currently under investigation (see <https://enzotarta.github.io/> for more details). The PostDoc will propose/adopt a core project aligned with the ones currently under investigation and will provide support for PhD and interns, also under the hat of the [European Project ELIAS](#). The position offered will be *in presence* at Telecom Paris - Institut Polytechnique de Paris, in the MultiMedia equipe of the IDS department, lasting 18 months. Proper equipment to fulfill the postdoc will be provided. Standard salary assessed on an Ecole basis. The postdoc will start as soon as possible, approx. two months after the acceptance notification- extensions are negotiable.

### Candidate profile

- PhD in Computer Science, Applied Mathematics, or related fields, with emphasis on Machine learning/Deep learning.
- Deep knowledge of Machine learning and Deep learning.
- Great passion and commitment towards research in AI.
- Proficiency in the English language, both spoken and written.
- Publications in Deep learning.

### How to apply?

Send CV and two reference letters<sup>1</sup> to [enzo.tartaglione@telecom-paris.fr](mailto:enzo.tartaglione@telecom-paris.fr)

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<sup>1</sup> The reference letters are not a strict requirement for submitting the application, but will be asked in later selection stages.