

# Theory and application of Deep Neural Networks

## a PostDoc call

### Overview

Deep Neural Networks can solve extremely challenging tasks thanks to complex stacks of (convolutional) layers with thousands of neurons, especially to solve computer vision-related tasks like image classification, object detection or image segmentation. Their success comes from their ability to learn from examples, not requiring any specific expertise and using very general learning strategies, based on loss' minimization. In the last few years a lot of focus has been devoted to two different aspects related to deep learning and computer vision: how can we improve the deep models learning strategy? How can we make these models focus on extracting the “right” information from the input, in an automatic way? Do we really need all the complexity we are currently using to solve tasks with deep learning? Is there going to be any difference at training and at inference time?

In this postdoc call, these and many other aspects will be explored, in between theory and application. The CDD position offered will be in presence at Telecom Paris - Institut Polytechnique de Paris, lasting 18 months. Proper equipment to fulfill the postdoc will be provided. Standard salary assessed on the ecole basis. The post doc will start at the earliest date possible, to be agreed with the candidate.

### Candidate profile

- PhD in Computer Science or related fields, emphasis on Machine learning/Deep learning.
- Deep knowledge of Machine learning and Deep learning.
- Coding in Python (C/CUDA is a plus), experience with Tensorflow/PyTorch or similar.
- Great passion and commitment towards research in AI.
- Proficiency in the English language, both spoken and written.
- (at least) One publication in Deep learning.

### How to apply?

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