

# Post-doctoral position: Optimization for cooperative machine learning



Keywords: *Hyper-parameter tuning, label noise, Deep Learning, smoothing, crowd-sourcing, [Pl@ntNet](#)*

Deadline for applications: **October 1, 2021**

Possible starting date: **December 1, 2021 (or early 2022)**

A post-doctoral position is available at Univ. Montpellier (Montpellier, France) funded by the CAMELOT (CooperAtive MachinE Learning and OpTimization) chair held by **Joseph Salmon**.

The successful applicant will have a PhD in applied mathematics, computer science, or a related area, with strong experience in optimization, statistics or machine learning. The applicant will be expected to conduct research in the area of optimization, high dimensional statistics and machine learning. Topics of interest include **hyper-parameter tuning** (in particular for sparse regression), **crowd-sourcing** (with a special focus on species identification), **decentralized learning and optimization** (especially with privacy preserving constraints in mind), **peer grading** (from a modeling and analysis point of view).

Experience in one or more of these areas is desirable, but not mandatory. The applicant will be hosted by the [EPS](#) team, a multi-expertise group within the mathematics laboratory ([IMAG](#)) of Univ. Montpellier. In addition to collaborating with **Joseph Salmon**, the successful applicant will have opportunities to interact with other researchers and engineers from [IMAG](#) (**B. Charlier**, **G. Durif**) but also with colleagues developing [Pl@ntNet](#) (a citizen science project designed to identify plants automatically thanks to camera pictures) such as **A. Joly** at Inria and **M. Servajean** at [LIRMM](#).

Interested candidates should send a CV along with contact information of two references to the PI. Any inquiries regarding the position can also be addressed via the same email address.

By recruiting on behalf of ANR and Univ. Montpellier, **Joseph Salmon** commits to providing equal employment opportunities to all qualified applicants.

## Supervisor

- Joseph Salmon:  
[joseph.salmon@umontpellier.fr](mailto:joseph.salmon@umontpellier.fr)

## Collaborators

- **B. Charlier**, **G. Durif** ([IMAG](#))
- **A. Joly**, **M. Servajean** ([LIRMM](#))

## Salary

Minimum gross monthly salary: 2585 Euros (could be higher upon experience).

## Duration

This is two-year position, with a possible one year extension.