

Post-doctoral Position in Statistics in Montpellier or Paris-Saclay

Topics : unsupervised learning, clustering, ranking, segmentation, active learning, hidden

Location : Montpellier, France within [MISTEA](#) lab or Paris-Saclay, France within LMO

Duration : 12 Months (with a possible extension up to 24 months)

Context and Aims : This position fits within the bilateral research program [ASCAI](#) between France and Germany funded by [ANR](#) and [DFG](#). This project brings together researchers in Statistics and Computer Science from Montpellier, Paris-Saclay, Potsdam and Munich.

The general aim of this project is to provide theoretical grounds for a collection of unsupervised learning that includes seriation, ranking, time series segmentation, and hierarchical clustering. In particular, we plan to characterize the optimal (in the minimax sense) learning rates for a class of related latent models. Moreover, many modern unsupervised learning applications are essentially of an online nature - and sometimes decisions have to be made sequentially on top of that. For instance, consider a recommender systems that sequentially recommends items to users. In this context where sequential, active recommendations are made, it is important to leverage the latent structure underlying the individuals.

We mainly seek a motivated researcher with a strong mathematical background. Depending on his/her interests, the candidate will work on any topic fitting within ASCAI.

Young researchers skills required :

- a PhD in Statistics or Machine Learning
- a strong mathematical background and record

Gross Salary : The salary is determined by the collective bargaining agreement for public employees in France (INM), it is a full time position.

Starting Date : As early as September 2023.

Supervision and Contact : Nicolas Verzelen (nicolas.verzelen@inrae.fr) in Montpellier and Elisabeth Gassiat (elisabeth.gassiat@universite-paris-saclay.fr) in Paris-Saclay. Depending on the interests of the candidates, close collaborations are possible with the partners of ASCAI project in Montpellier, TU Munich, Paris-Saclay, or Potsdam.

Requested documents for application : A resume, a cover letter, and a list of two people who may be contacted for reference letters should be sent to Nicolas Verzelen (nicolas.verzelen@inrae.fr).