PLEASE

projection, learning and sparsity for efficient data processing

ERC funded post-doctoral positions at Inria Rennes (France)

The [PANAMA team](#) (Parsimony and New Algorithms for Audio & Signal Modeling) at İnria, Rennes, France is seeking highly qualified candidates for postdoctoral positions funded by the ERC (European Research Council) in the context of the project PLEASE (*Projection, Learning and Sparsity for Efficient data processing*).

Objectives

Two particular objectives of PLEASE are:

a) to pioneer the new field of *Compressive Statistical Learning*, at the frontiers of Machine Learning and Signal Processing, which potential has been demonstrated by recent achievements of PLEASE in compressive clustering from randomized moments, and infinite-dimensional sparse recovery;

b) to explore and demonstrate the potential of *sparse and low-dimensional models beyond traditional linear inverse problems*, when the data model itself and/or the sensing model need to be learned, including e.g. sparse dictionary learning and blind calibration;

The recruited postdocs will conduct a vigorous research program within the scope of the project, and are expected to show independence and team working attitude at the same time.

The successful candidates, which can come from different areas (applied mathematics and statistics, signal processing, machine learning, information theory, computer science) are expected to bring their expertise to the PLEASE task force and will be encouraged to develop collaborations with other groups at İRİSA / İnria Rennes. The positions are endowed with travel, computing, and experimental resources. Sample research topics include:*Compressive Statistical Learning, Provably Good and Efficient Dictionary Learning, and Fast Transforms on Graphs*.

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Context

The [PLEASE project](#) gathers a small research group to explore the frontiers of Signal Processing and Machine Learning under the auspices of sparsity and low-dimensional projections. With its [task force](#) of graduate students and postdocs with different scientific backgrounds, and its program of international visitors, PLEASE develops the mathematical and algorithmic foundations of new ways to acquire, analyze and process the information content of complex data, streams and collections.

Environment

The PANAMA team develops mathematical and statistical signal models and algorithms with an emphasis on acoustic and audio applications. İt gathers around 20 researchers, post-docs, PhD students and engineers with expertise in various fields of mathematical and statistical signal processing and audio.

The team is part of the [İRİSA / İnria Rennes - Bretagne Atlantique Research Center](#), located on the campus of the Université de Rennes İ, in the historic city of Rennes, capital of Britanny. The center is a major player in computer science, applied mathematics, and information technology gathering about 400 scientists (including 90 full-time researchers, 70 professors and associated professors, and 190 PhD students) in an international environment.

Starting date and duration: fall 2015/early 2016, one year - renewable

Location : http://www.inria.fr/en/centre/rennes

Scientific Contact: remi.gribonval@inria.fr

To apply:

Applicants are requested to send a detailed CV, a list of publications and a brief statement of research interests. This material, together with two letters of reference, shall be sent to remi.gribonval@inria.fr (cc: stephanie.lemaile@inria.fr).