



## Title

PostDoc position      AIMS : Big data technologies for real time monitoring of the environmental impact of offshore human activities.

## Information

Employer      University of Caen Normandy – CNRS UMR6072 GREYC – SINAY

Context      AIMS project - Acoustic Integrated Monitoring System - <http://aims.sinay.fr/> supported by Europe and Normandy region through FEDER-FSE 2014-2020.

When      Sept. 2017 – for 18 months.

Where      CNRS UMR6072 GREYC and SINAY – Caen, France.

Net salary      Between 2,000 and 2,500 € per month, including benefits.

## Keywords

Machine learning, acoustic, signal processing, web design, data visualisation, big data.

## Technologies

Python, R, Matlab, Hadoop, Spark, D3.js, C++, java

## Context

The AIMS project consists of building an integrated system for monitoring offshore human activities to assess the impact of these activities on marine fauna, and especially on marine mammals. The whole system is built around big-data technologies and aims to use benefits of such technologies to collect and analyse all possible data related to the marine environment and the offshore human activities.

## Detailed description

The purpose of AIMS is to design integrated technologies for decreasing the financial, logistical and technical costs of marine environmental monitoring, assessments and studies. AIMS is based on buoys embedding data processing and upload to the data lake. Such devices make it easier to investigate the anthropogenic impact on the wildlife.

The candidate will mainly have to deal with the big-data aspects of the AIMS project:

1. build and deploy algorithms on a big-data architecture
2. gather heterogeneous data from multiple sources and develop connectors for the data lake
3. offer open-sourced algorithms to the research community;
4. design a cloud platform for experiments with the detection and modelling algorithms.

### **Expected profile**

- Researcher with recent PhD in computer science / applied mathematics
- Experience with machine learning / big-data
- Background knowledge on (acoustic) signal processing
- Perfect English oral and writing skills

### **Application**

For more information about this position, please contact François Rioult ([francois.rioult@unicaen.fr](mailto:francois.rioult@unicaen.fr)).

To apply, send an email **before June 30<sup>th</sup>**, including a motivation letter, a CV, copies of diplomas, contact details of referees.