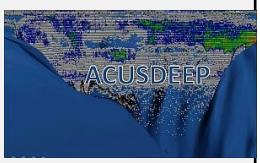
CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

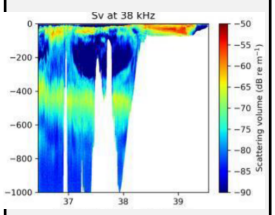
Team Leader
Marian Peña
Cientifica Titular CSIC
marian.pena@ieo.csic.es
@acusdeep
https://marianpena.github.io/ACUSDEEP/

Job Offer
4-year Predoctoral Researcher

ACUSDEEP Team
Centro oceanográfico de Baleares (COB)
Instituto español de Oceanografía (IEO, CSIC)

Project: TETRIS: digital Tools for massivE daTa pRocessing in FIsheries AcousticS: leveraging repository access and global inferences





PROJECT SUMMARY: The project TETRIS aims to leverage the compilation and processing of large acoustic databases from public online repositories, which will improve the temporal and spatial scale of fishery acoustics, facilitating greater accuracy in the study of ecological processes influenced by climate change. TETRIS is a collaboration between IEO-CSIC (Marian Peña), University of Washington in Seattle (Wu-Jung Lee), NOAA (Carrie Wall) and Universitat de les Illes Balears (Carlos Guerrero). The three main objectives of the project are: 1) Development of acoustic downsampling algorithms, 2) Massive integration of data from acoustic repository networks and 3) Data mining and associating information from net and acoustic mesopelagic data.
Keywords: Massive data, Cloud computing, Artificial Intelligence, Advanced data analysis, Climate change and biodiversity, distributed computing.

Minimum requirements:
- Degree in marine science, physics or similar
- Proficiency in English required
- Disponibility to work in the USA for two internships
- High proficiency in programming languages, particularly Python

Merits to be considered:
- Previous experience in Fisheries acoustics
- A basic knowledge of Spanish is advisable
- Experience with algorithm development, cloud computing and machine learning
- Master in related subjects

What is offered:
The 4-year PhD will be based in Palma, Spain, but training includes two international internships at the University of Washington in Seattle (ML and scalable acoustic processing workflows) and at NOAA (acoustic repositories, cloud computing). Training on cloud computing will also be provided by the University of Baleares: master in Mass Data Analysis and Intelligent Systems (<120 ECTS) and a 1-month internship. Possibility to participate in research surveys. Acces to the NOAA cloud AWS and close collaboration with the UW team on development of open access acoustic tools. Participation in international conferences and working groups.
4-year contract. Budget for internships and equipment.

Application: Interested candidates please send a motivation letter and cv to Marian Peña (marian.pena@ieo.csic.es, Subject "Job Offer MOMENTUM"). Documents should be sent in English.

IMPORTANT: ALL CANDIDATES HAVE TO REGISTER IN THE CSIC Employment App BY THE 15th SEPTEMBER 2024 AND BE ALREADY ADMITTED IN A DOCTORATE PROGRAM. NON-SPANISH DEGREE TITLES NEED TO BE OFFICIALLY HOMOLOGATED/RECOGNISED IN SPAIN. Contact us for details.

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