Seville, 19 April 2022

Data Science and Artificial Intelligence Assistant 2 (DSAIA-2)

Vacancy – Terms of reference

A. Job description

JOB TITLE: Data Science and Artificial Intelligence Assistant-2 (DSAIA-2)

PURPOSE: The DSAIA-2 will assist both PIs of the SmartEcoMountains LifeWatch ERIC-funded project (Thematic Centre on Mountain Ecosystem and Remote Sensing, Deep Learning-AI e-Services University of Granada-Sierra Nevada) at the University of Granada, and the CTO –ICT-Core Director–, in the strategy and the day-to-day implementation of the Deep –Machine Learning and AI algorithms and methods as required

LOCATION: University of Granada (Andalusia, Spain)

POSITION: Full-time

FUNDING RESOURCES: ERDF Andalusia Projects – SMART ECOMOUNTAINS (Ref. LifeWatch-2019-10-UGR-01) Operational Framework 2014-2020 POPE

COMPENSATION: Competitive salary, commensurate to degrees and relevant experience

B. Main responsibilities

- S/he will directly report to the PI of the SmartEcoMountains (Work Package 7) at University of Granada, as well as to the Chief Technology Officer/Director of the ICT-Core;

- S/he will hold a position which requires multi-, inter- and trans-disciplinary ICT skills accrediting proven research experience on artificial intelligence and deep learning techniques;
- S/he will lead end-to-end research to solve the application of artificial intelligence algorithms to the automatic identification of biodiversity: i.e., review and application of the state of the art in machine learning and end-to-end skills to build intelligent systems (data collection, data preprocessing, iterative development of deep learning models);
- In addition, the individual would provide support with a comprehensive knowledge of computer vision problems such as object detection and image classification. i.e., downloading, pre-processing and post-processing of microscopic images of aquatic microorganisms, particularly of microscopic algae. Annotating these data to map different types of microalgae;
- In particular, developing deep learning models to automatically identify, detect and locate individuals and colonies of microalgae in microscopic images of water samples.

C. The ideal candidate should meet the following requirements:

1. A degree in Computer Science Engineering;
2. Be a PhD holder or carrying out such a degree in computer science or related field;
3. Minimum one-year experience in similar position (junior researcher);
4. Accredited experience on Research, Development and Innovation engineering initiatives;
5. Accredited experience in designing deep learning models for remote sensing applications demonstrated with publications in relevant journals;
6. Proven professional experience working for public bodies and government agencies, relevant to scientific/technological/innovation activities;
7. Good presentation and reporting skills, fluency in written and spoken English;
8. A high-standard work ethic.

ADDITIONAL DESIRABLE SKILLS

- Proven professional experience on relational database management (NoSQL, MySQL, SQLServer, etc.) for scientific purposes;
- Proven professional experience on open-source systems, platforms and standards;
- Strong experience with ML frameworks such as PyTorch, TensorFlow/Keras, etc.;
- Knowledge of programming languages (C/C++/ C #, Python, Jupiter Notebook, etc.).

D. The vacancy is subject to the following procedure:

- A short covering letter and Curriculum Vitae (EUROPASS format and annexes, 10 pages at the most) shall be submitted to the Chief Technology Officer/ICT-Core Director cto@lifewatch.eu and in cc to ictoffice@lifewatch.eu by **3 May 2022**. Please write **"DSAIA-2 Candidature"** in the mail subject;

- The selection process will follow the Employment Policy of LW ERIC;

- S/he will be appointed full-time. A competitive gross salary, based on the qualifications and experience of the candidate, will be offered. Employment will be in Spain, follow Spanish employment law and be subjected to a 180-day trial period;

- This position is a full-time job. Her/his main office will be located at the University of Granada (Spain) with short stays at the LifeWatch ERIC ICT-Core premises in Seville (Spain), without prejudice to the establishment of others in the future;

- Start date in office for the appointed individual: **May 2022**.

LifeWatch ERIC is an equal opportunity employer, and encourages all qualified candidates to apply, regardless of race, gender, age, national origin, or sexual orientation.