Data Science and Artificial Intelligence Assistant 3 (DSAIA-3)

Vacancy – Terms of reference

A. Job description

JOB TITLE: Data Science and Artificial Intelligence Assistant-3 (DSAIA-3)

PURPOSE: The DSAIA-3 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: LifeWatch ERIC ICT-Core Office in Seville (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 Chief Technology Officer/Director of the ICT-Core as PI of the LifeWatch ERIC Andalusia ERDF projects;

- 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 provide support in the coordination of related activities in the ICT-Core Office, in particular, those related to apply artificial intelligence algorithms to remote sensing problems: Downloading, pre-processing and post-processing of RGB and multispectral time series of very high-resolution satellite images. In particular, annotating these data to map different types of high mountain shrubs. Developing deep learning models to map and detect the change in time series of aerial and satellite orthoimages of high mountain shrubs.

C. The ideal candidate should meet the following requirements:

1. An MSc degree in Computer Science Engineering;

2. Be a PhD holder or carrying out such a degree in computer science within the field of AI;

3. Minimum of three-year experience in similar position;

4. Accredited experience in deep learning application for imagery classification justified with journal publications, conference communications and book chapters in the field;

5. Proven experience in Google Earth Engine and its Python API for remote sensing images processing and analysis;

6. Accredited experience on high quality remote sensing imagery datasets creation for artificial intelligence usage;

7. Accredited experience in state-of-the-art analysis and comprehensive surveys elaboration in regard with an AI application field;

8. Accredited experience as software development engineer;

9. Accredited experience in high performance computing field;

10. Accredited professional experience working for private/public bodies and companies, relevant to scientific/technological/innovation activities related to AI research and innovation;

11. Experience in data pre- and post-processing techniques for high-quality deep learning models;

12. Good presentation and reporting skills, fluency in written and spoken English;

13. Ability to work under tight deadlines with changing priorities;

14. Availability to travel abroad, and accompanying LW ERIC CTO-ICT-Core Director and/or other staff during the different missions to accomplish;

15. A high-standard work ethic.

ADDITIONAL DESIRABLE SKILLS

- Proven professional experience in Python and R programming;
- Proven professional experience on Tensorflow, PyTorch and Keras frameworks;
- Knowledge in machine learning and deep learning;
- Knowledge of programming languages (C/C++/C#, Jupiter Notebook, etc.);
- Proven professional experience on databases administration and management.

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-3 Candidature"** in the mail subject;
- The selection process will follow the Employment Policy of LifeWatch ERIC;
- S/he will be appointed for full-time position. 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 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.