

Developer for Cloud-based Virtual Research Environments

Vacancy – Terms of reference

Job description

PURPOSE: We are looking for a scientific programmer to develop services and tools for a Virtual Research Environment (VRE), focusing on digital twin-based scientific applications in ecosystems, biodiversity, and ecology.

JOB TITLE: Developer for Cloud-based Virtual Research Environments

LOCATION: Virtual Laboratories and Innovations Centre premises in Amsterdam (VLIC), Netherlands

POSITION: Full-Time, 24 months

FUNDING RESOURCES: LifeWatch ERIC Strategic Working Plan.

Main responsibilities

- The candidate will work closely with the data scientists, modellers, and domain researchers to develop customised digital twin building blocks based on simulations, data assimilation, and visualization components, and integrate software components as part of a distributed Virtual Research Environment for a broader community;
- The candidate will develop user-centered composition and integration tools for coupling those building blocks as digital twins based on application-specific scenarios;
- The candidate will actively review the state-of-the-art technologies in the context of cloud computing, semantic web, search engine, big data and scientific workflow management, follow Agile, Co-development and other best practices of modern software engineering in Cloud environments to effectively deliver solutions to the VRE;

- The candidate will be contracted by LifeWatch ERIC VLIC and will work within the premises of the Multi Scale Networks Systems Group (MNS), Informatics Institute at University of Amsterdam;
- The candidate will closely collaborate with domain scientists from the domains of ecosystem and biodiversity in the groups of the Biogeography & Macroecology (BIOMAC) lab and the Department Theoretical and Computational Ecology within the University of Amsterdam.

The ideal candidate should meet the following requirements

- Master degree in Computer Science or similar;
- Experience in programming;
- Be familiar with data science technologies;
- Strong interest in learning new technologies from different domains;
- Willingness to work in a multidisciplinary team (ecology, computer science, software engineering);
- Ability to speak and communicate in English at an academic level both verbal and written;
- Experience in one or more major pre-programming languages (e.g. Java, Python);
- Familiar with UNIX/Linux environment;
- Up-to-date knowledge about various software development and deployment tools including minimally Git/GitHub;
- Experience with web programming, Cloud computing and elastic search;
- Experience with web applications and libraries (e.g., Jupyter, HTML, JavaScript, and PHP);

- Experiences with user studies and search evaluation;
- Based in The Netherlands and able and willing to work in the LifeWatch ERIC offices in Amsterdam.

The vacancy is subject to the following procedure

- A **short covering letter** and **Curriculum Vitae¹ (EUROPASS format and annexes, 4 pages at the most)** shall be written in English and submitted by **20 May 2024**. Please use the form available at this link: <https://zfrmz.eu/SALOL42kxiSd8W0nIYF3>;
- The selection process will follow the Employment Policy of LifeWatch ERIC;
- Only shortlisted candidates will be re-contacted. Selected candidates may be called for an interview. Interviews will take place from **21 May - 4 June 2024**;
- She/he will be appointed for a 24 months month period. A competitive gross salary, 3.226,00 - 5.090,00 € based on the qualifications and experience of the candidate, will be offered. Employment will be in Netherlands, follow Dutch employment law;
- This position is Full-Time. Her/his main office will be located at the Virtual Laboratories and Innovations Centre premises in Amsterdam, Netherlands, without prejudice to the establishment of others in the future;
- Start date in office for the **Developer for Cloud-based Virtual Research Environments: as soon as possible**.
- A knowledge security check may be part of the selection procedure. Click [here](#) for more information

¹ According to the Personal Data Protection Act any resume not mentioning explicitly the following wording: 'I authorise the use of my personal data in accordance with Personal Data Protection Act' will be automatically deleted from our database and consequently not taken into consideration.



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