

Job Title: Earth Observation Digital Twin Earth Applications Scientist

Requisition ID 11953 - Posted 04/01/2021



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of EO Programmes.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

Post

Earth Observation Digital Twin Earth Applications Scientist

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

Location

ESRIN, Frascati, Italy

Description

EO Digital Twin Earth Applications Scientist in the Enterprise Section, Data Applications Division, Science Applications and Climate Department, Directorate of Earth Observation Programmes.

Duties

You will report to the Head of the Enterprise Section and be responsible for defining and implementing projects supporting the integration of EO data and leading-edge modelling capabilities to enhance insight into human-Earth system interactions in the context of development of a Digital Twin of the Earth (DTE).

In addition, you will help develop strategic technical competences in the processing and application of EO data in operational and commercial domains.

Responsibilities include:

- setting up and implementing activities to integrate EO data with Earth system, ecosystem and anthropogenic process models for enhanced decision support;
- defining and implementing innovative projects to develop innovative EO applications;
- advancing the use of Artificial Intelligence/Machine Learning and EO within novel application domains;
- building technical level collaboration and partnerships with international organisations (such as EU-DG Connect, EU-JRC, Eumetsat and ECMWF) to contribute to the Digital Twin Earth initiative;
- cooperating with other EOP teams on the DTE effort (ground segment, Phi-lab, Science section, Platform engineering sections) to address evolving EO application priorities;
- engaging downstream industry, identifying their needs, implementing innovative EO projects to foster growth in the EO information industry through the generation of marketable EO-based products and services;
- promoting increased uptake of those new EO-based products and services;
- contributing to ESA communication efforts to promote EO applications results, mission achievements and EO benefits for society, including serving in the role of ESA Ambassador at relevant events, such as scientific conferences and user consultations;
- supervising and supporting the work of Young Graduate Trainees, National Trainees and Research Fellows.

Technical competencies

Experience in the management and monitoring of research and development activities

In-depth Experience with leading-edge Earth Observation data analytics technologies

Experience in the use of satellite EO data for Earth system, ecosystem or anthropogenic process characterization

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Education

A PhD or equivalent in a relevant discipline such as engineering, Earth science, computer science, environment, ecology or ecosystem science or data science is required

Additional requirements

Specialist working experience in one of the following areas would be an advantage:

- AI-based processing of geospatial or environmental data
- Integrating EO/geospatial data with local and regional Earth system and ecosystem models
- The use of complex models to support policy formulation or management decision-making
- Knowledge of international scientific community
- Strong problem-solving skills to deal with day-to-day operational challenges, together with demonstrated planning and organisational skills.
- Strong results orientation with the ability to set priorities and present practical solutions orally and in writing.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

The closing date for applications is 25 January 2021.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us at contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada, Latvia and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (<https://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>)

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.