

Job Title: Earth Observation Data Scientist

Req ID 9213 - Posted 10/02/2020



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Earth Observation Programmes.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post

Earth Observation Data Scientist

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

Location

ESRIN, Frascati, Italy

Description

Earth Observation Data Scientist in the Φ -Lab Explore Office, Φ -Lab Division, Future Systems Department, Directorate of Earth Observation Programmes.

Duties

Reporting to the Head of Office, you will support the development of innovative Earth observation applications and missions fostering use of new digital technologies such as artificial intelligence.

You will be part of an open, collaborative, multi-disciplinary team based in the Φ -lab at ESRIN working in active collaboration with colleagues across ESA, as well as with diverse research communities and new players in the private sector and start-up ecosystems.

Your duties will include:

- exploring the fields of big data analytics and AI applied to EO, by defining and managing demonstration/exploratory studies and projects to be competitively tendered and executed by industry and research organisations in ESA Member States, including the preparation of technical specifications and statements of work for the above studies and projects;
- strengthening links with the scientific community experienced in AI and big data analytics, facilitating seminars, workshops, boot camps, etc;
- establishing dialogues with emerging information technology players and start-ups to use their tools and know-how to benefit selected Earth science/applications topics;
- supporting rapid prototyping and benchmarking of innovative EO-based solutions using AI and other innovative IT;
- supporting development of a suite of AI-for-EO (AI4EO) challenges including data preparation;
- providing some AI-related technical support and guidance to the Φ -lab team.

Technical competencies

Knowledge of EO products, applications and market sectors
Computer science including Artificial Intelligence technologies

"NewSpace" technologies, methods and markets

Behavioural competencies

Ambassadorship
Problem Solving
Teamwork
Self Motivation
Innovation & Creativity

Education

A Master's degree or equivalent in relevant disciplines, e.g. engineering, computer science, applied physics, data science is required.

Additional requirements

- A PhD in a relevant field will be a strong asset
- Knowledge of geospatial big data analytics techniques
- Experience in programming in several languages e.g. Python, R, JavaScript
- Knowledge of machine learning techniques and tools
- A research record in the AI field is an asset
- An ability to think outside the box and explore new avenues with natural curiosity and a passion for new subjects and research areas

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 9 March 2020.

If you require support with your application due to a disability, please email 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 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. (<http://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.