

EUROPEAN SPACE AGENCY

Head of the Data Science Section

Job Req ID: 11954

Closing Date: 23 November 2021

Publication: Internal & External

Vacancy Type: Permanent

Date Posted: 26 October 2021

Vacancy in the Directorate of Science.

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

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

Location

ESAC, Villanueva de la Cañada, Spain

Description

The Head of the Data Science Section reports to the Head of the Data Science and Archives Division and is responsible for the definition and implementation of a data science strategy for the Science and Operations Department. The purpose of the Data Science Section is to develop innovative and disruptive data science activities with a view to increasing the science return of ESA's Science missions through enhancing the science data exploitation, as well as improving the efficiency of mission science operations.

You will manage a small team and associated industrial services and external contracts. You will interface with all teams within the Department and will look for synergies and opportunities for collaboration with other data science initiatives within ESA and beyond.

Duties

You will be responsible for leading and managing the Data Science Section in carrying out its tasks, which include:

- Defining and implementing a data science strategy for the Department, in close collaboration with the ESAC Science Data Centre and the Science Operations Centres;
- Proposing, and engaging people with, innovative new projects promoting the use of Data Science within the Department — with the aim of expanding our missions' science return through science data exploitation and increasing the efficiency of science operations;
- Seeking partnerships for data science initiatives with other groups within and outside ESA;
- Engaging the scientific community to further exploit ESA science archives through new data science services;
- Representing the Directorate in ESA working groups about Artificial Intelligence and other

- Representing ESA and the Science Directorate for its data science activities at external conferences, workshops and working groups;
- Keeping abreast of current and upcoming data science technologies (e.g. artificial intelligence, big data, data mining, machine learning, data visualisation, and so on).

As this is a Head of Section post, the required managerial duties include:

- taking responsibility for delivering team results;
- providing direction, including the planning and distribution of team members' activities;
- reviewing individual performance against set objectives through the annual assessment exercise and by providing timely and regular constructive feedback;
- creating a motivating work environment and promoting good team spirit;
- supporting team members with ongoing professional development by encouraging learning and delegating responsibilities.

Technical competencies

Data analytics methods and tools

Strong computational and data science skills

Computer science including Artificial Intelligence technologies

Software engineering and system design for Machine Learning

Behavioural competencies

Results Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A Master's degree in Computer Science, Data Science, Space Science or Space Applications required for this position.

Additional requirements

Assets for this position are:

- Previous people management experience;
- Experience in dealing with (ESA) contracts, in particular those related to R&D;
- Experience in the development and execution of science operations, preferably for large space- or ground-based international projects;
- A background in one or more of the following domains: solar systems science, astrophysics, space science.

Candidates should have:

- the potential to manage individuals or a team of experts;
- the ability to organise their activities and ensure a motivating work environment;
- strong leadership capabilities, with proven relationship management and communication skills;
- the ability to drive team performance, developing their people by encouraging learning, delegating responsibility and giving regular and constructive feedback;
- strong problem-solving skills to deal with day-to-day operational challenges, together with demonstrated planning and organisational skills;

People management experience is an asset, as is international experience, i.e. outside your home country, as well as experience in diverse functional areas relevant to ESA activities.

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.

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 email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following State 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, Lithuania 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.