

## Job Title: Young Graduate Trainee for Information Technology

Req ID 3723 - Posted 19/01/2018



### EUROPEAN SPACE AGENCY

Young Graduate Traineeship Opportunity in the Directorate of Internal Services.

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

##### Young Graduate Trainee for Information Technology

This post is classified F1.

#### Location

ESAC, Villanueva de la Cañada, Spain

#### Our team and mission

Within the ESA IT Department, the Security and Specialised Services Division is responsible, across all ESA sites, for the management and coordination of activities related to ICT Security and technical IT infrastructure. These responsibilities also include identification of new technologies and integration of new IT solutions with the aim to better support ESA Programmes in achievement of their objectives.

Interested candidates are encouraged to visit the ESA website: <http://www.esa.int>

#### Field(s) of activities

The numerous IT systems and services deployed throughout the various technical and business domains in ESA are successfully delivering the expected results within the scopes of their disparate domains. Under the influence of the latest technology trends, ESA has identified that an information exchange between those systems would not only exponentially increase the value these systems deliver within their individual domains, but also foster a more holistic business approach. The main goal of the activity is to build an artificial intelligence platform for digitalisation of processes through an advanced layer of automated information exchange between the ESA IT systems and services in order to connect those disparate domains.

The proposed activity shall deliver a prototype eco-system which supports the aforementioned automated information exchange. The Young Graduate will be tasked with the creation of the first building blocks of that system:

- exploration of the current approaches and technologies in the corresponding fields,
- creation of an ontological model,
- creation of an API library,
- development of a prototype software

It is important to note that, even though the activity will draw the main principles from the current mainstream approaches in the field, it shall not unconditionally follow those approaches if they are deemed to be unsuitable. The Young Graduate will be wholeheartedly supported by the tutor to employ a critical mind and a philosophical imagination to create the most suitable model for the intended purpose. He or she may eclectically select any tools and methods considered best for the job, and even freely invent any missing 'ingredients'.

#### Technical competencies

Knowledge of relevant technical domains

Relevant experience gained during internships/project work

Breadth of exposure coming from past and/or current research/activities

Knowledge of ESA and its programmes/projects

#### Behavioural competencies

Self Motivation

Communication

Continuous Learning

Cross-Cultural Sensitivity

Teamwork

#### Education

Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a technical or scientific discipline. In addition, a good command of the Python programming language with a demonstrated practical experience is essential.

#### Additional requirements

Applicants with a deep theoretical understanding of the Knowledge Representation and Reasoning field of AI, in particular Ontology Engineering, will have an advantage. A strong personal interest in Epistemology and Cognitive Science is highly desirable.

Applicants must be fluent in English and/or French, the working languages of the Agency. A good proficiency in English is required.

In addition, applicants should demonstrate good interpersonal skills and the capacity to work both independently and as part of a team.

During the interview the candidates' motivation and overall professional perspective/career goals will also be explored.

#### Other information

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

#### The closing date for applications is 04 February 2018.

If you require support with your application due to a disability, please email [contact.human.resources@esa.int](mailto: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, and the UK, or Slovenia as an Associate Member, Canada as a Cooperating State, Bulgaria, Cyprus, Latvia, Lithuania and Slovakia as European Cooperating States (ECS). Priority will first be given to candidates from under-represented Member States.

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