

Job Title: Intern in the Earth Observation Science and Data Applications

Req ID 8941 - Posted 16/10/2019



EUROPEAN SPACE AGENCY

Internship Opportunity 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

Intern in the Earth Observation Science and Data Applications

Location

ESRIN, Frascati, Italy

Our team and mission

The Data Applications Division in the Department of Science, Applications and Climate based at ESA/ESRIN in Frascati, Italy, is a dynamic team in charge of engaging scientific, public and commercial sector user communities, identifying their needs, implementing EO data exploitation projects, tools and platforms to address these needs, and transferring validated results and applications from research to operations.

The Division builds up new scientific, governmental and private sector communities and works with them in EO related Research and Innovative development and demonstration activities. These range from basic science through the development cycle up to pre-commercial applications development. Activities cover new sensors and measurement techniques, new algorithms, application of AI and testing the application of state of the art processing capabilities to address emerging EO opportunities. In addition the division objective is to advance Earth system knowledge, to develop new applications and methods to maximize the societal impact of ESA EO missions in particular in relation to the mitigation of, and adaptation to, environmental change. The Division is also responsible for coordinating ESA's EO training and education activities.

The trainee will be integrated within a group of early career researchers to foster exchange, innovation and team working.

Interested candidates are encouraged to visit the ESA website: www.esa.int

Internship activities and learning areas

Topic :

Education activities in Remote Sensing, with focus on Earth Observation and G.I.S. applications to Forest Fires.

After a critical survey of the recent literature results in this area, the candidate will update the ESRIN G.I.S. (region of the Castelli Romani) with a layer related to forest fires mapping and fire risk, using relevant data and algorithms. The candidate will also help the division develop educational material / exercises in this domain.

References (not exhaustive list):

<https://www.esa-fire-cci.org/>

<https://sentinel.esa.int/web/sentinel/thematic-areas/emergency-management/forest-fires>

See also the recent workshop EARSel Remote sensing of forest fire Data, science and operational applications and related ESA/Earsel training: <https://eo4society.esa.int/event/iv-esa-earsel-cnr-school-remote-sensing-for-forest-fires/>

<https://cnrfire2019.eu/#training>

Competencies

Communication
Continuous Learning
Cross-Cultural Sensitivity
Self Motivation
Teamwork

Education

Applicants should preferably be in their final or second to last year of a University course at Masters Level (or equivalent) in a technical or scientific discipline.

Additional Requirements

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.

Knowledge and background in the domain of Remote Sensing and G.I.S, are required. Practical experience in Image Processing Software packages, including the ESA toolbox SNAP, is an asset.

Other information

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

The closing date for applications is 15 November 2019.

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, and the United Kingdom. Nationals from Slovenia, as an Associate Member, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Latvia, Lithuania and Slovakia as European Cooperating States (ECS).