Training Opportunity for Belgian Trainees

Reference	Title	Duty Station
BE-2022-EOP-SDD	**Data Scientist for Earth Observation**	**ESRIN**

Overview of the mission:

The "Digital Platforms Section" within Data Applications Division in the Earth Observation Directorate's "Science, Applications and Climate Department" explores innovation on shared services/tools to facilitate EO exploitation by EO/Data Scientists, Application developers and Value adders on leading edge cloud platforms.

Overview of the field of activity proposed

As part of the "Digital Platforms Section", you will be involved in the prototyping of cutting edge cloud based EO processing and analytic capabilities. You will contribute to defining, developing and evaluating state-of-the-art EO platform capabilities, for example, as part of the EuroDataCube (https://eurodatacube.com/), openEO platform (https://openeo.cloud), the Deep Earth System Data Lab (https://www.earthsystemdatalab.net) and other relevant platform activities in the ESA EOP Science, Applications and Climate Department. The developed platform capabilities seek to increase the adoption of Open Science and FAIR data principles. You will furthermore contribute to building a community on EO Open Science, and actively promote the use of EO Platforms within the scientific community, e.g. through engagement with the ESRIN Science Hub and the ESA Science Clusters.

This will include the following tasks:

- Explore, test and evaluate cloud based APIs and (Python) software libraries;
- Proactively test/evaluate Jupyter Notebooks, capturing shortcomings and highlighting further improvements;
- Develop new Jupyter notebooks e.g. on innovative use of ESA and Copernicus EO mission data;
- Develop new Jupyter notebooks on EO data fusion, ML capabilities and services or applications use cases;
- Contribute to creating tutorial materials, trainings and capacity building using digital platform technologies;
- Contribute to science communication on digital platform technologies;
- Support relevant related efforts in the ESA Network of Resources and the Open Geospatial Consortium;
- Support EO platform requirements of the various section teams in the Applications Division;

Required background:

- Master's degree in a technical or scientific discipline
- Programming skills (mainly Python, some R)
- Knowledge of broader data science domain and Earth Observation science is an asset
- Good interpersonal and communication skills
- Ability to work in a multi-cultural environment, both independently and as part of a team
- Fluency in English and/or French, the working languages of the Agency