



2020-IPR-I-000-015572

From big geospatial data to Insights

<p>Position for:</p> <p>1 Trainee TYPE II</p>	<p>Background: The <i>Text and Data Mining Unit</i> (I3) of the European Commission's <i>Joint Research Centre</i> (JRC) in Ispra, Italy, is looking for a trainee to support the JRC's Big Data Analytics project (BDA) team in its effort to improve its image information extraction tools available for exploratory visualisation and interactive analysis/prototyping as well as for batch processing. These tools are deployed on the JRC Big Data Platform (BDAP), a multi-petabyte scale data and processing platform developed and managed by the BDA team. The tools consist of standard image processing/machine learning libraries complemented by a range of advanced image analysis functions. The BDAP offers 3 main services via a web-access: batch processing, remote desktop, and interactive visualisation and analysis. These services are used by numerous projects across JRC with a focus on geospatial data as well as any other data sources associated with a location.</p> <p>The BDA team has developed software, available as Python packages to facilitate the use of these services: pyjeo and interapro. As a successful trainee, you will get familiarised with the software on the BDAP with the help of the available documentation. You will then help to its further promotion by creating training material (e.g., in the form of Jupyter notebooks) and developing new functions. You will also actively assist users of the software in creating their processing chains.</p> <p>Required skills are (a) a Master degree (or an almost completed Master degree) in computer/data science, engineering, or related areas; (b) Python programming skills; (c) good working knowledge of English.</p> <p>Useful skills and experiences include: (d) good knowledge of image analysis/processing; (e) programming skills in Python, experience with geospatial data/data associated with a geolocation; (f) hands-on experience with Linux (g) the proven ability to work independently and as part of a team.</p> <p>In your application, please provide clear information on your skill set, by elaborating on the above-mentioned list of requirements and by listing your level of languages and your computer / programming skills.</p> <p>The JRC team: The <i>Joint Research Centre</i> (JRC; http://ec.europa.eu/dgs/jrc/) is the scientific-technical arm of the European Commission. The approximately 2200 JRC</p>
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	<p>employees working in Ispra are from all EU countries and there are also some non-EU visitors. The working environment is multilingual, multi-cultural and multi-disciplinary. The JRC's Big Data Analytics project (BDA) team develops innovative methods for the timely processing and analysis of massive amounts of geospatial data for a range of applications from partner projects across JRC (e.g., environment, agriculture, development, and natural hazards). The JEODPP platform consists of a multi-petabyte scale storage system co-located with computing capacities including GPUs for machine learning. It is versatile in the sense that it accommodates the needs of users with very different levels of computer skills. The BDA team contributes to the publication of scientific publications in conferences and peer-reviewed journals (see publication list at https://jeodpp.jrc.ec.europa.eu/home/).</p> <p>For rules and general eligibility requirements, see the link below.</p>
Institute Unit	Directorate <i>Competences</i> I03 – <i>Text and Data Mining Unit</i>
Duration Preferred starting date	5 months 1 November 2020
JRC Site Country	Ispra Italy
<u>Rules, eligibility requirements</u>	Trainees: https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees