Ref. Unit Request: Earth Observation Laboratory (EO Lab)

Vacancy Title: Data Engineer

Location of work to be performed: Terceira, Azores

Contract Duration: 3 years

Job Description:

AIR Centre is hiring a Data Engineer with background in computer science and programming for the Earth Observation (EO) Laboratory. The successful candidate shall support multidisciplinary teams in different fields of expertise by developing and deploying pre-operational prototypes of different data processing pipelines. This shall include for example using and combining Earth Observation data from Copernicus satellites, Unmanned Aerial Vehicles and/or Ocean sensor stations to extract relevant data and generate products/sub-products relevant for the scientific, industry business and other stakeholders of the AIR Centre.

Tasks and Responsibilities:

- Design, implement and test new/upgrades to frameworks for consuming data from different data sources and its retrieval, processing and storage, including but not limited to satellite and in-situ data
- Optimize and monitor performances of the different processing pipelines
- Carry out data analysis and critical review of performances and functionalities to provide compliance to solutions requested by other team members/specialists
- Interface with different team members to ensure transfer and/or evolution of solutions to other entities/teams
- Pre-processing and cleaning of large datasets when possible applying automation
- Create/merge/import databases and perform data visualization when needed
- Document and present results in a structured and organized way
- Support and setup hardware equipment or cloud processing infrastructure if needed
- Support generation of products/sub-products relevant for the scientific, industry business and other stakeholders of the AIR Centre.

Qualifications and experience requirements:

- Computer science degree with work experience of 5 years in programming
- Experience of Programming in at least (3) of these languages: Python, SQL, Scala, Java, C++, Matlab
- Knowledge on these technologies and tools: Spark, Hadoop and GIT
- Familiarized with cloud computing technologies such as AWS, Azure or others
- Familiarized with Machine Learning Algorithms (classification, pattern recognition, automation of processing chains,...)
- Strong analytical and communication skills
- Self-motivated and pro-active attitude
- Good command of English language (written and spoken)
- Preferable (but not mandatory) knowledge in one or more of the following: Tensorflow, Torch, Tableau, Copernicus system and services, and experience in Predictive Modelling
- Available to acquire new knowledge and work in a team environment