

Training Opportunity for Luxembourgish Trainees

Reference	Title	Duty Station
LU-2020-EOP-SDE 2)	Blockchain for EO Applications	ESRIN
<p>Overview of the unit's mission: The Enterprise section in the Data Applications Division of the EO Programmes Directorate is responsible for stimulating the development of innovative capabilities within European industry (in particular SMEs, spin-offs and start-ups) linked to the commercial or operational exploitation of EO data and derived information. In particular, the section is working on a range of state of the art AI based approaches for EO data enhancement and processing including super-resolution, pattern recognition and hybrid modeling.</p>		
<p>Overview of the field of activity proposed: One of the main constraints on expanding AI processing of EO data in areas such as pattern recognition/target identification or short term forecasting is the lack of suitable training data. One of the main contributing factors is limited access to proprietary datasets which could act as training data for Deep Learning based models.</p> <p>You shall investigate the potential application of distributed ledger technologies (DLT) such as blockchain as a framework to support partial access to proprietary data where the data owners are not willing or able to make the dataset available on an open and free basis.</p> <p>You shall apply state of the art DLT capabilities to a set of representative situations for specific datasets. This shall be undertaken in cooperation with the owners of these datasets. For the purposes of the demonstration exercises, it is not required to work on actual sensitive data but merely to agree with the data owners which elements of the datasets will be restricted and how access to the data will be managed and tracked.</p>		
<p>Required education:</p> <ul style="list-style-type: none"> • Master-level degree in EO data processing over multiple instruments • Some experience in AI based approaches for data enhancement or pattern recognition • Fluency in English and/or French, the working languages of the Agency 		