

## Training Opportunity for Luxembourgish Trainees

Reference	Title	Duty Station
LU-2022-EOP-SDE	AI Enhanced Data Fusion and Analytics for Law Enforcement or Maritime Security	ESRIN
<p><b><u>Overview of the mission</u></b></p> <p>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 modelling.</p>		
<p><b><u>Overview of the field of activity proposed</u></b></p> <p>You shall investigate state of the art deep learning approaches for automated pattern recognition applied to multiple datasets. This may include integration of machine learning and physical models. As a minimum the analysis shall integrate optical and SAR imagery and may also include additional data sets. Potential areas of interest include automated vessel detection and characterization, detection of illegal activities in the terrestrial environment (e.g. poaching, illicit mining) and developing methods for integrating AI/EO derived information with conventional information layers and data streams.</p>		
<p><b><u>Required background</u></b></p> <ul style="list-style-type: none"> <li>• Master's degree in EO data processing over multiple instruments</li> <li>• Some experience in AI based approaches for data enhancement or pattern recognition</li> <li>• Good interpersonal and communication skills</li> <li>• Ability to work in a multi-cultural environment, both independently and as part of a team</li> <li>• Fluency in English and/or French, the working languages of the Agency</li> </ul>		