AI4COPSEC - New AI Initiative to Boost EU Security and Maritime Monitoring

4 December 2024 - **AI4COPSEC** (Full name: Security enhancement through heterogeneous data fusion and improved AI/ML-powered Copernicus maritime and border surveillance services) is a new **Horizon Europe** project **integrating state-of-the-art AI solutions** with data from the Copernicus satellite programme to address **urgent environmental and security challenges**.

The **Copernicus Security Service (CSS)** plays a critical role in ensuring the European Union's safety by using Earth Observation (EO) data for border control, maritime surveillance, and international security operations. However, satellite data alone often falls short due to factors like weather, satellite positioning, and data gaps. To overcome these challenges, the **AI4COPSEC** is harnessing cutting-edge **artificial intelligence (AI) and machine learning (ML) technologies** to transform how security-related data is processed and used.

The project running from 1 December 2024 for 36 months is lead by **Simula Research Laboratory** who is coordinating efforts among an interdisciplinary consortium of ten partners across Europe. As part of this collaboration, **eOdyn,** a deep-tech company specializing in ocean monitoring solutions, will act as the technical coordinator, leveraging its expertise in AI algorithms and operational data systems for maritime applications.

AI4COPSEC will use self-supervised machine learning, GeoAI models, and advanced algorithms to process large, diverse data sets. This approach will reduce response times for incidents like oil spillage, illegal fishing and irregular migration, and enhance ship detection with advanced imaging and algorithms and therefore **improve maritime surveillance**.

"We are very excited to launch the AI4COPSEC project that gathers ten partners from all over Europe. The projects objectives are ambitious, with the goal of ***leveraging advanced AI/ML for improving Copernicus security service****. Many public and private stakeholders expect us to advance significantly the research and innovation related to this service. We are eager to demonstrate the capabilities of the partners to altogether successfully tackle the challenges of analysing various heterogenous sources of data for Copernicus." – highlighted* ***Arnaud Gotlieb, AI4COPSEC project coordinator*** *and Chief Research Scientist at Simula Research Laboratory.*

By integrating these new technologies, AI4COPSEC will strengthen the EU's ability to monitor and respond to maritime risks, align with the EU Maritime Security Strategy (EUMSS) and ensure **better safety for Europe's borders and waterways**.

Funded by
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