MASTERING EOTDL

A TUTORIAL ON CRAFTING TRAINING DATASETS AND DEVELOPING MACHINE LEARNING MODELS

Fran Martín

Product & Data @ earthpulse!

ABOUT ME

Product & Data lead at EarthPulse, with the goal of bridging the gap between Earth Observation data and user needs.

OBJECTIVES

During the session, participants will explore the full workflow of using the Earth Observation Training Data Lab (EOTDL): from discovering and accessing curated training datasets in its cloud-based repository to leveraging pre-trained machine learning models for tasks such as classification, object detection, and parameter estimation.

The demonstration will highlight how EOTDL’s open and collaborative platform lowers the barriers to developing AI for Earth Observation, streamlining dataset creation, curation, and reuse.

THE PROBLEM

Alex Wants to Start in AI4EO.

Alex is a student passionate about Earth Observation and AI.
He wants to train his first model, experiment, and learn.
But there’s a problem: he doesn’t know where to start.

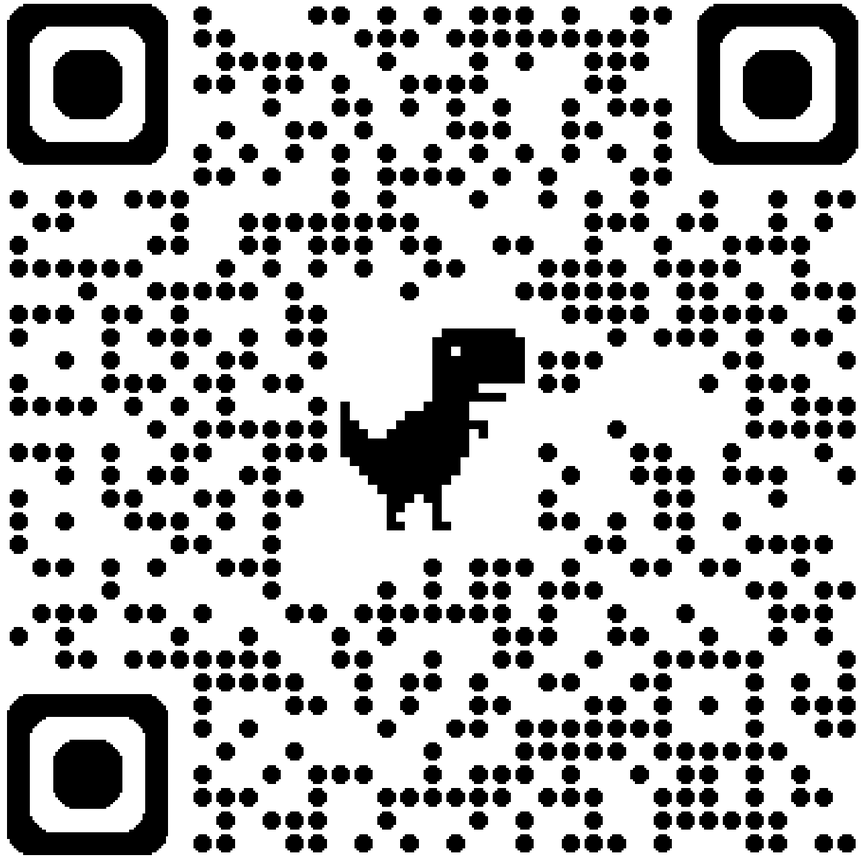
Finding high-quality datasets takes time.
Labeling data manually feels overwhelming.
Training a model from scratch seems too big of a leap.
Alex is stuck — and his curiosity is at risk of fading.

THE SOLUTION

Then Alex discovers the Earth Observation Training Data Lab.
In just a few clicks, he explores a cloud repository with over 100 curated EO datasets, downloads one for free, and finds a pre-trained model ready to use.

Within hours, Alex is not just reading about AI4EO — he’s actually training models, testing ideas, and contributing back to a global community.

EOTDL transforms curiosity into action, empowering Alex to grow as an AI4EO practitioner and innovate without barriers.



https://github.com/fmariv/workshop-eotdl-bids25