

A satellite image of Earth from space, showing a large portion of the planet's surface with blue oceans and white clouds. The Earth is curved, and the background is the blackness of space.

TRAINING AI MODELS WITH SCANEO FOR INTELLIGENT SATELLITE IMAGE LABELING

A HANDS-ON TUTORIAL

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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 observe the full workflow of using SCANEO: from selecting areas of interest in satellite imagery to generating high-quality labeled datasets for tasks such as semantic segmentation and object detection.

The demonstration will highlight how SCANEO's active learning loop enables iterative improvement, reducing labeling errors and optimizing dataset quality.

THE PROBLEM

Alex Wants to Label Satellite Data

Alex has found a great satellite imagery dataset and wants to train an AI model.

But labeling the data manually will take weeks — maybe months.

He tries drawing polygons and classifying objects by hand, but the process is slow, tedious, and error-prone.

Every time he makes progress, he realizes the model still performs poorly because the dataset isn't large enough.

Alex is frustrated — his idea is stuck at the labeling bottleneck.



THE SOLUTION

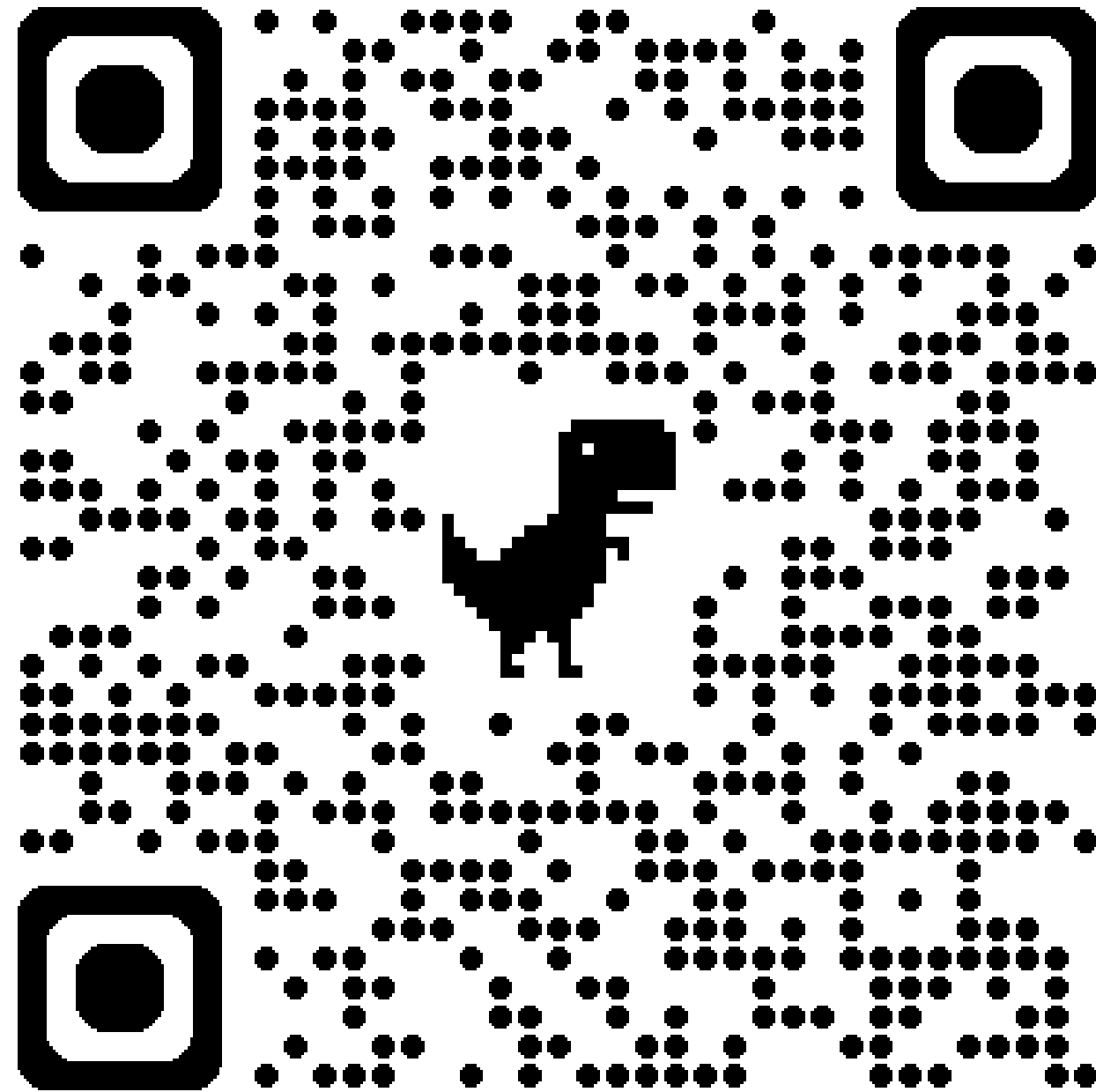
Then Alex discovers SCANEO, the AI-powered labeling tool for satellite imagery.

He selects a small area of interest, generates initial labels, and trains a first model.

Thanks to SCANEO's active learning loop, the model suggests the next best samples to label, making the process faster and more accurate.

In just hours, Alex builds a high-quality labeled dataset and a better-performing model — without burning out on manual work. SCANEO turns labeling into an intelligent, iterative workflow, letting Alex focus on innovation instead of repetitive tasks.





<https://github.com/fmariv/workshop-scaneo-bids25>