Another Earth

We are building the leading visual synthetic data engine to unlock the full potential of Artificial Intelligence in Earth Observation and address the key environmental challenges of our time

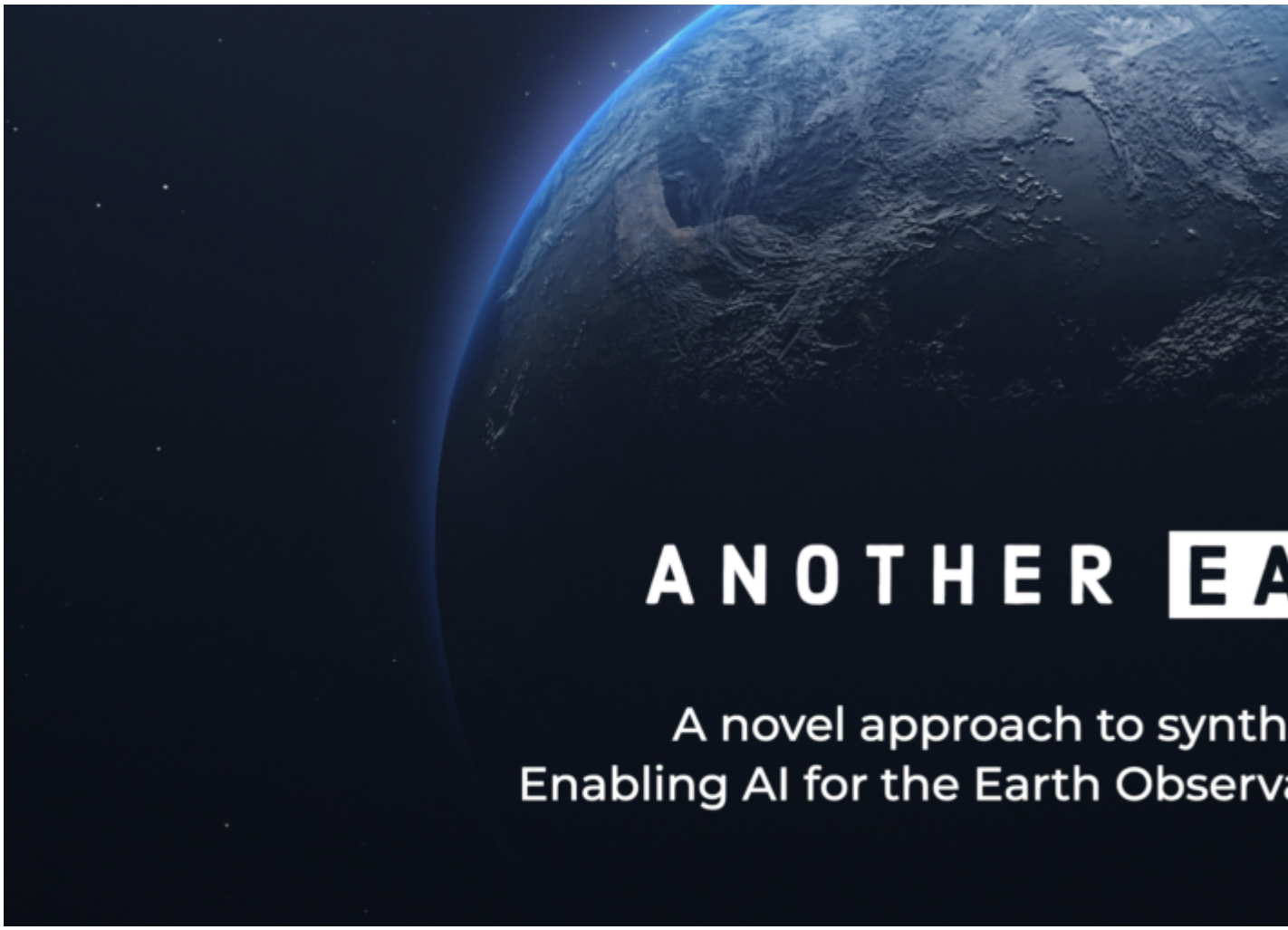
As a society, we are facing massive environmental challenges due to climate change. Artificial Intelligence (AI) in Earth observation is emerging with the potential to address and mitigate some of the most pressing environmental concerns, ranging from rapid deforestation to land degradation, pollution of both land and water, the escalating threat of wildfires and the rapid pace of urbanisation. However, to unleash the real potential of Artificial Intelligence it is necessary to overcome the biggest challenge in the training of AI models: the access to high quality training datasets.

The quality of AI is highly dependent on the quality of the data it learns from. In the case of training AI models for Earth observation application, the data usually consists of image pairs made of satellite images and corresponding colour masks (segmentation masks). These masks tell the AI about the type of surface or object (roads, buildings or a certain type of crop) for every corresponding pixel in the satellite image it's trying to understand.

Gathering such high quality training data is difficult and involves labour-intensive tasks such as data sourcing, manual labelling, and segmentation - resulting in a resource-intensive, time consuming and expensive process. Furthermore privacy laws, the requirement of diversity in datasets to prevent AI bias and ensure compliance with regulations like GDPR and the EU AI Act add further complexity. Therefore, synthetic training data is emerging as a groundbreaking solution to the challenges of AI model training.

Synthetic training data is defined as information (i.e. text or images) that is created using algorithms and used across multiple industries to train, test and validate AI models. It not only meets the need for large and specialised datasets but is also compliant with privacy and security requirements.

Another Earth proposes a novel approach to synthetic data generation. Our vision is to be the leading synthetic data engine that combines generative AI and 3D processing methods to quickly generate synthetic satellite imagery and the required labels automatically.



The resulting datasets can then be used to train specialised AI models for real world use-cases. Advantages include the ability to generate large amounts of synthetic images quickly and accurately, customisable datasets with high and variable resolution, anonymised data, pixel perfect labels,image segmentation, the ability to detect changes over time.
Synthetic training data has the potential to fast-track the growth of Earth observation value-added services, projected to exceed €5.5 billion in revenues by 2031. In the face of evolving regulations, including the EU AI Act and GDPR, the adoption of Synthetic Data is gaining momentum as it paves the way for compliant and scalable AI solutions.

Our business model consists of a combination of providing training data as a Service (DaaS) and customised data on a project basis. The Intellectual Property lies predominantly in the tools to generate the synthetic data, notably the masking, segmentation and GAN based generative tools. Another Earth fully intends to put an IP protection strategy in place as part of the incubation period to protect our proprietary AI tools and create a barrier to entry for future competition and incumbents.

Today, competitive approaches are limited to the insertion of synthetic 3D objects into real satellite imagery and some limited generation of synthetic data without image segmentation and labelling. Another Earth's plan of fusing generative AI and 3D processing methods is new and demonstrates a highly innovative approach. The technology has been introduced to customers and has received an overwhelmingly positive response.

The founding team combines decade long AI and 3D experience. Maya Pindeus is a leading entrepreneur in the Computer Vision field. She has scaled a Predictive AI company from inception to 50+ people and 20m USD in funding. Felix Geremus is a 3D technical director and GIS expert. He has 20 years experience in delivering solutions for some of the biggest brands including Disney and Mercedes Benz and previously CTO of a startup in the Digital Twin space. The founding team is working with leading researchers in the

field of synthetic imagery within the Earth Observation domain.

USP

Another Earth proposes a novel approach to synthetic data generation:
A synthetic geospatial data engine that combines generative AI and 3D processing methods to quickly generate synthetic satellite imagery and the required labels automatically. Another Earth will enable the training of scalable AI models to address environmental challenges and fast track the growth of the Earth Observation industries to exceed €5.5Bn in revenues by 2031

Value Proposition of Synthetic Data:

1. Reduction in cost human resource and error rate

Fully labelled, masked and segmented synthetic datasets for AI training for increased accuracy.

2. Unlimited amounts of high resolution synthetic datasets

Significant reduction in the amounts and cost of raw satellite imagery required for training.

3. Creating data where there is none

Synthetic data creation for rare objects, remote areas, edge cases and consistent temporal datasets.

4. Scalable and future proof approach

With the ability to accommodate new sensor and resolution types.

Target market

Forestry and conservation:Synthetic training data to help detect changes in forest areas, to monitor deforestation and enable compliance with EUDR regulations.

Infrastructure: Synthetic training data to enable better detection of changes, property and infrastructure classification, urban vitality prediction and building height extraction.

Agriculture: Synthetic training data to enable better crop detection algorithms, including rare crops, crop yield prediction, drought prediction and species classification.

Environmental monitoring: Synthetic training data to enable better model training for environmental monitoring, including erosion monitoring, contamination and soil monitoring.

Space connection

Another Earth generates synthetic satellite data to enable better and more efficient model development and training for the Earth Observation industries

Social media channels

LinkedIn

Contact: Maya Pindeus (maya@anotherearth.ai)

Website: https://anotherearth.ai/