

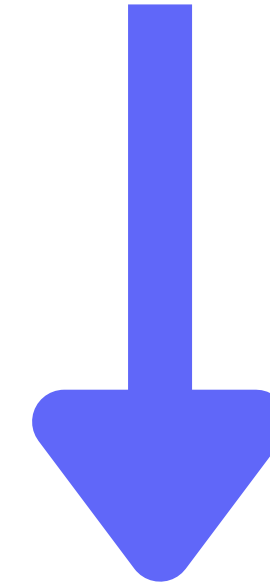


AI Universe

**Innovative Solution
for Accurate Computer Vision**

July 2024

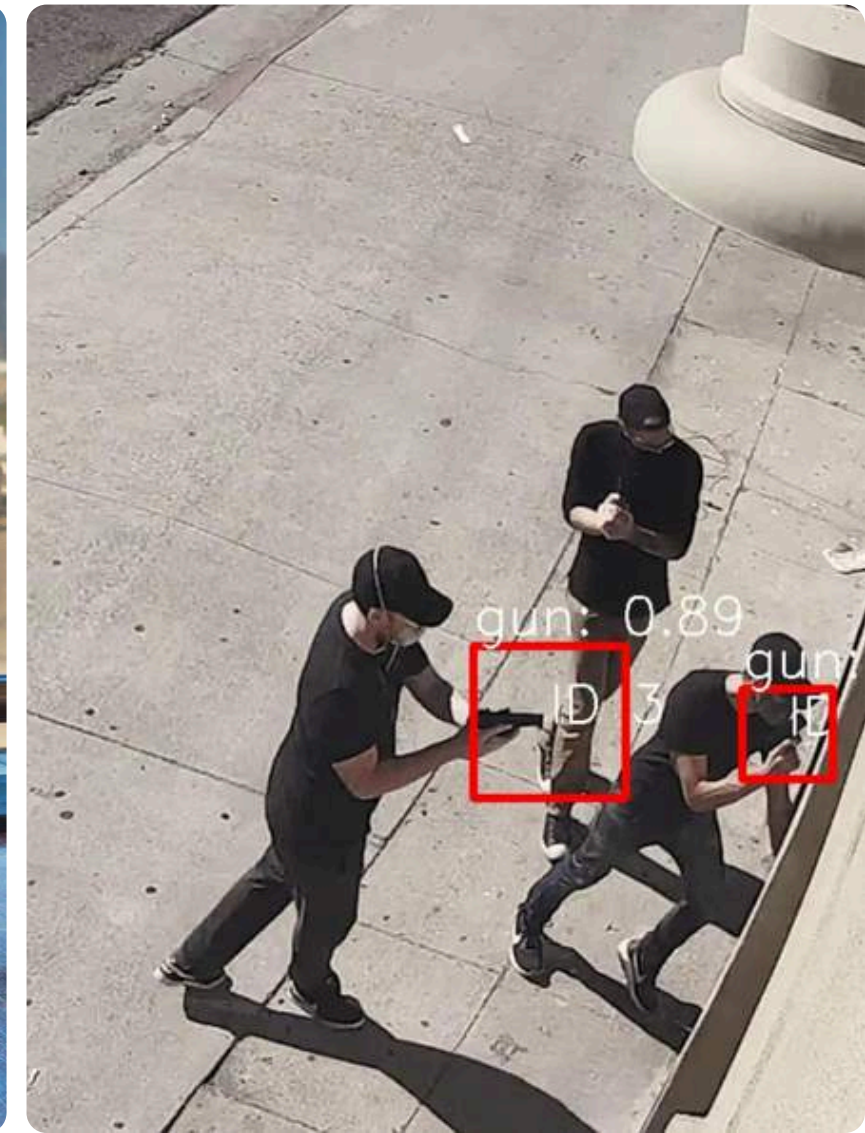
The accuracy of detection model depends mainly on training data -
Datasets have to be **diverse, accurately labelled and cover edge cases.**



In order to achieve good accuracy results, model needs **large amount** (several hundred thousands) of diverse labelled images.

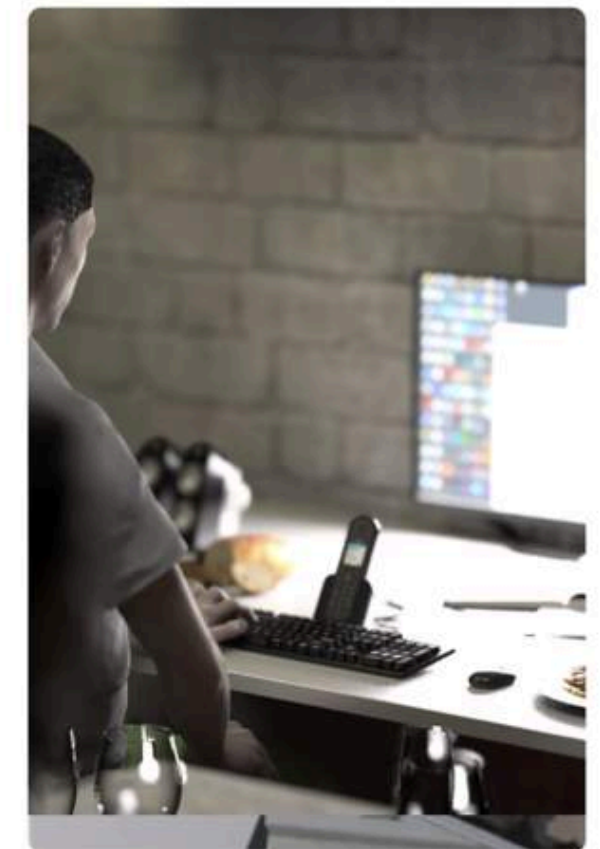
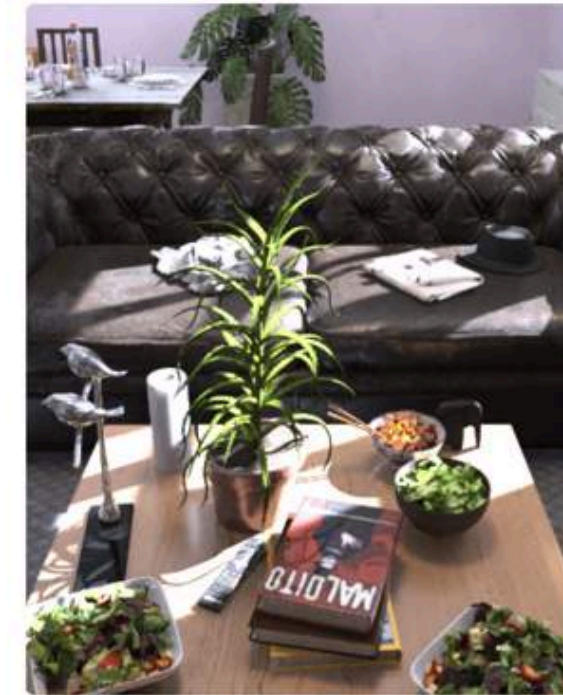
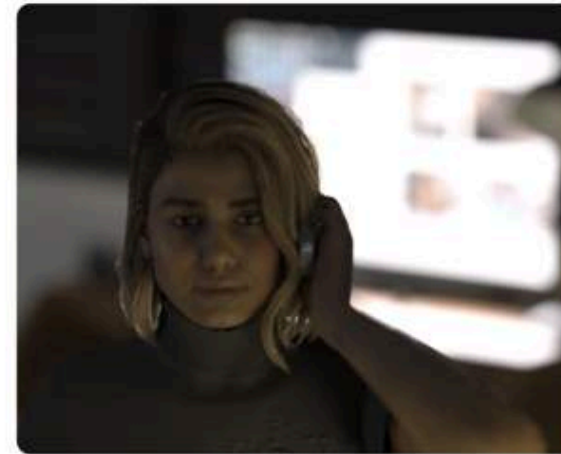
That is almost **unachievable** for scenarios
where real-life data capture is challenging:

- various surveillance situations
- fall detection
- abandoned luggage
- suspicious behaviour
- armed people
- armed vehicles etc.





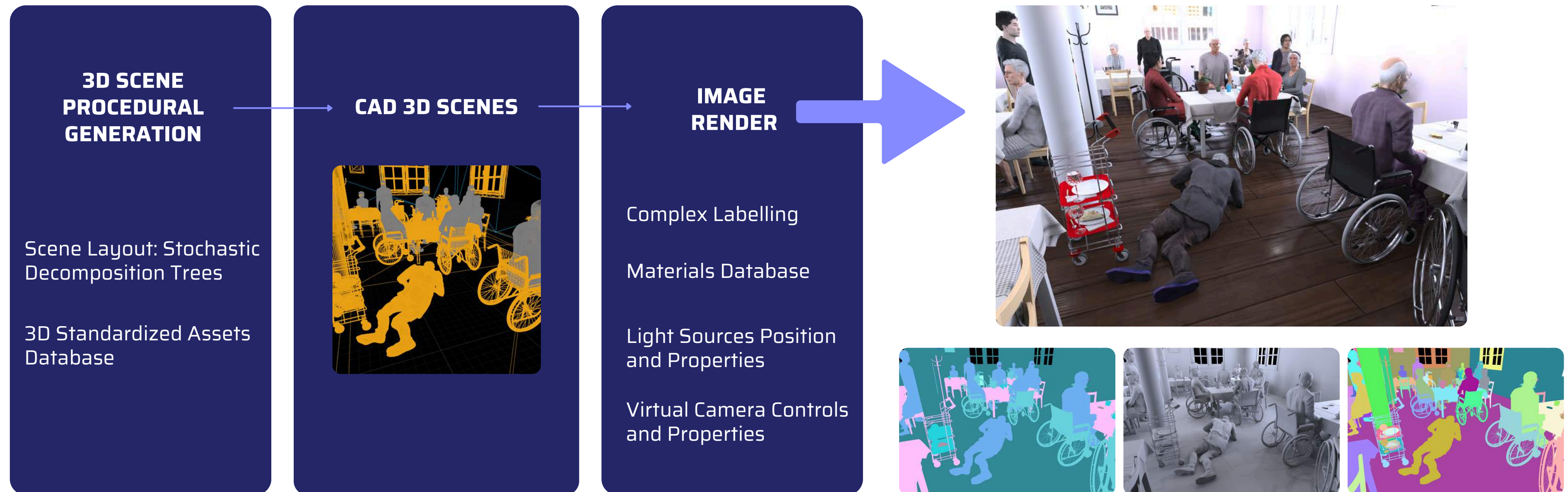
The answer to this problem -
synthetic, diverse, labelled image dataset.



At AI Verse we created an innovative and effective way to generate **diverse and fully labelled image datasets**.

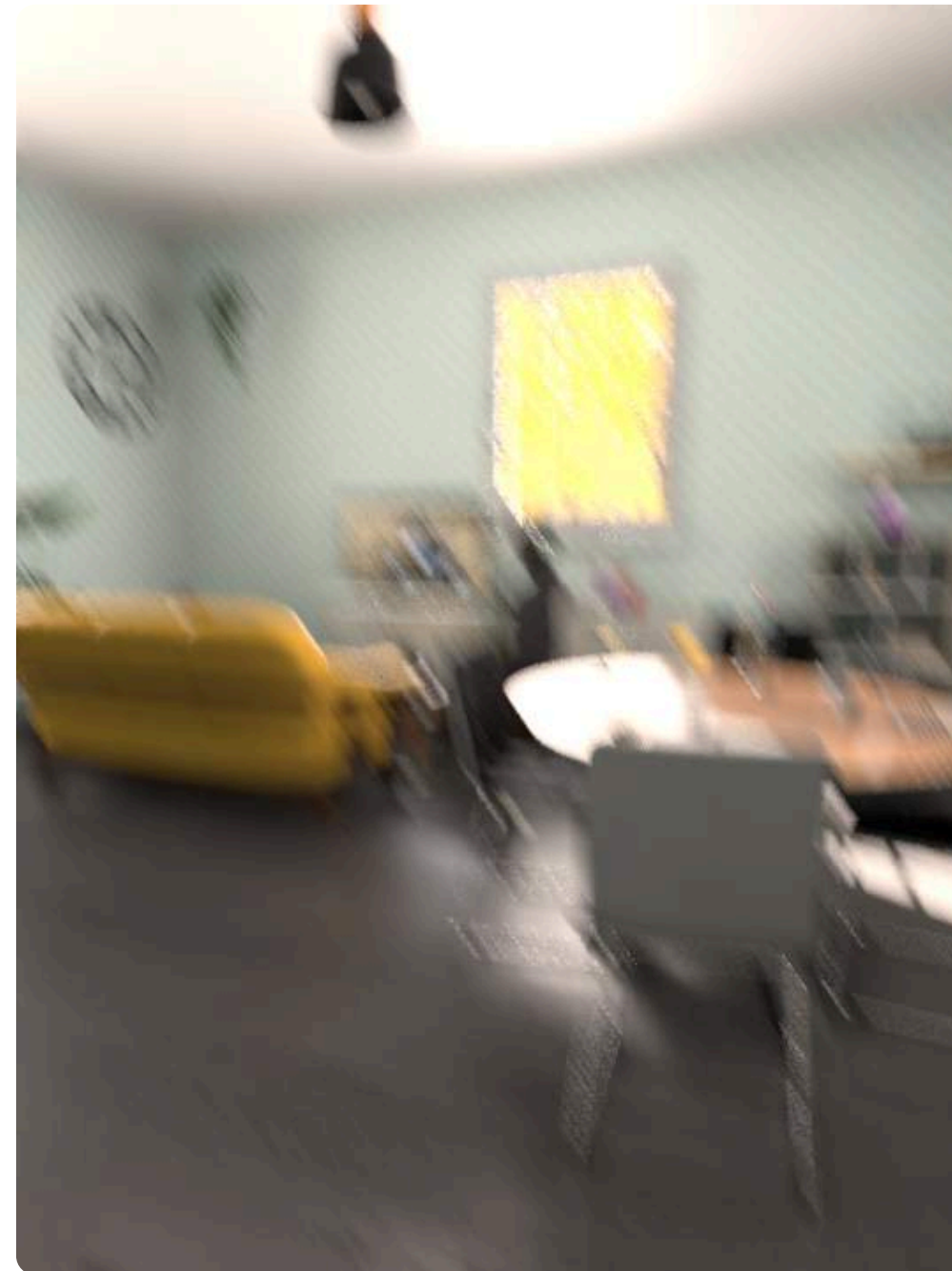
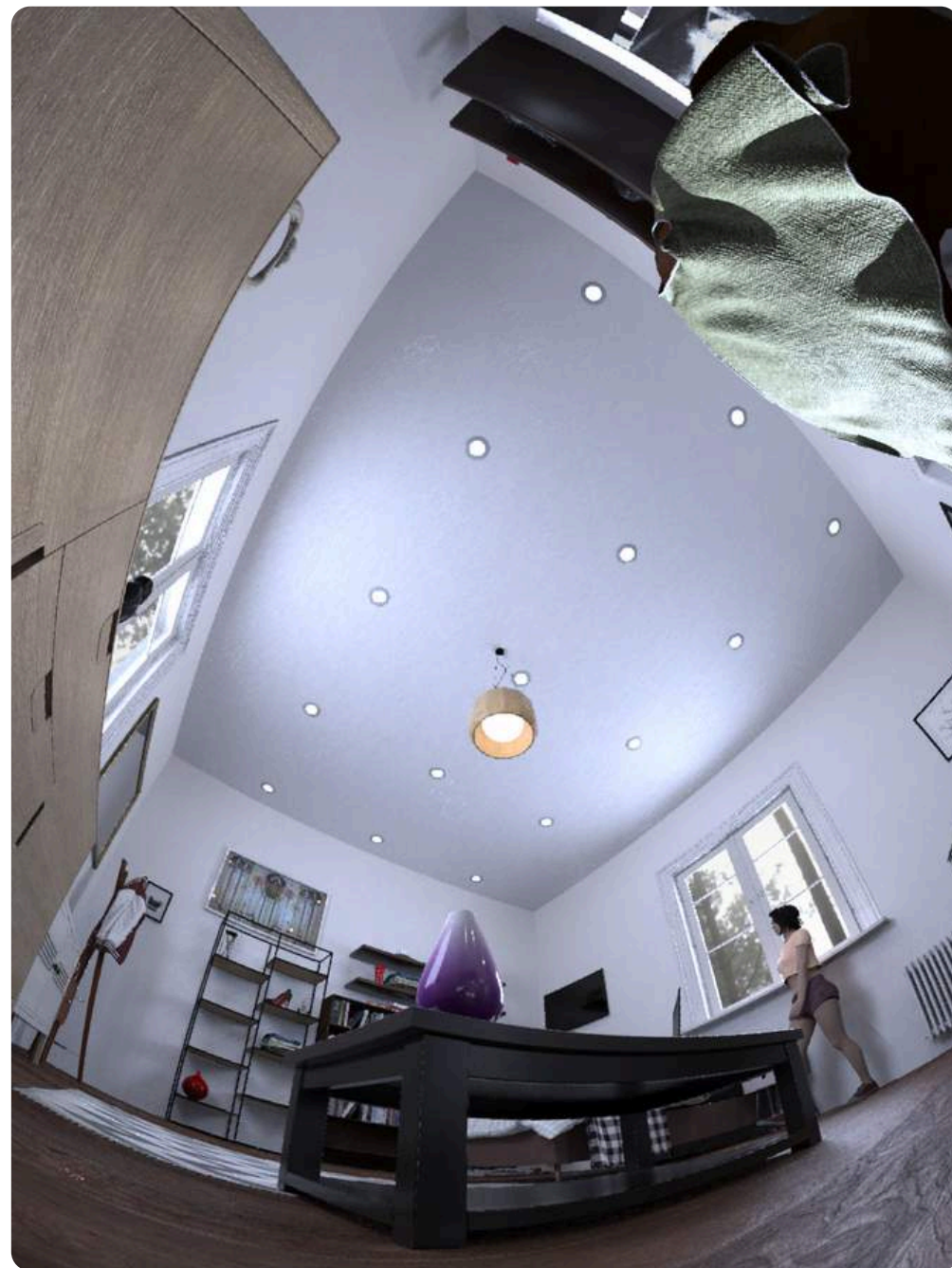
AI Verse Procedural Engine Controllable by the User

Fully Labelled Image Datasets
(8 labels with 3d)



Our **data adapts** to your needs.

Picture taken from Pinhole / fisheye camera.



Motion blur, field of view, noise, compression, color map modeling.

Various camera placement strategies (6D pose, distance from the object of interest) fully controllable.

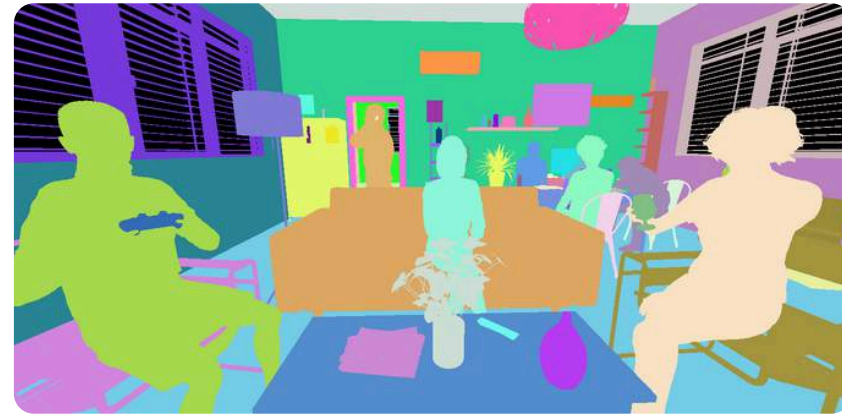


One platform, **8 pixel perfect labels.**

Classes



Instances



Depth



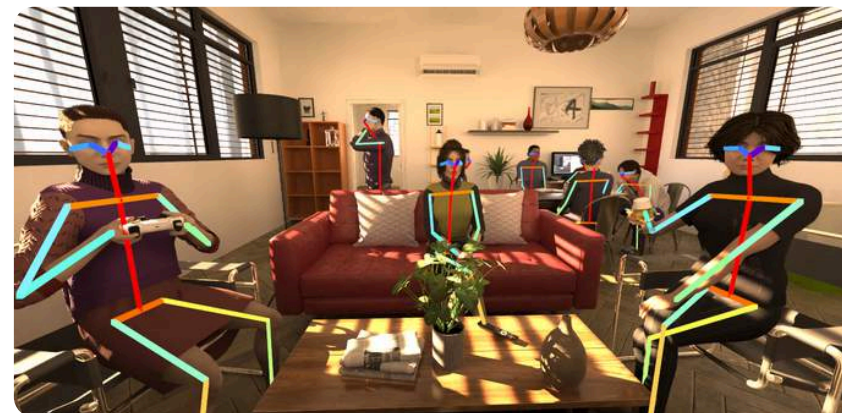
Albedo



2D/3D Bounding



2D/3D keypoints



Normals

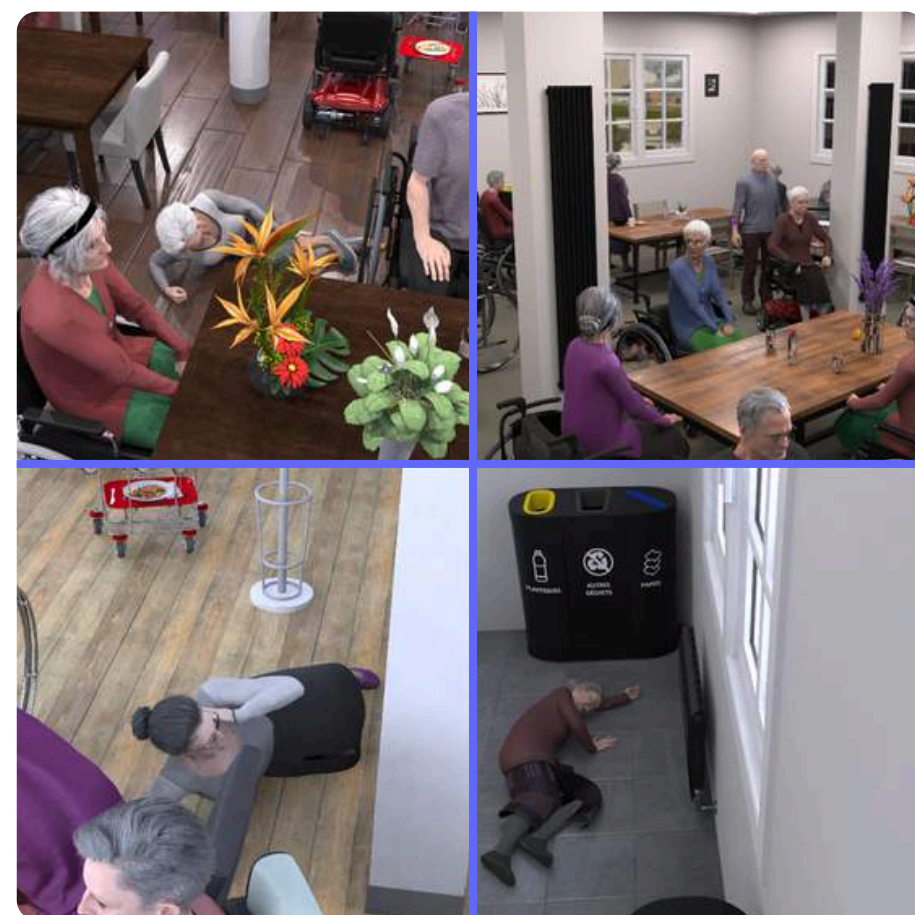


Lighting only

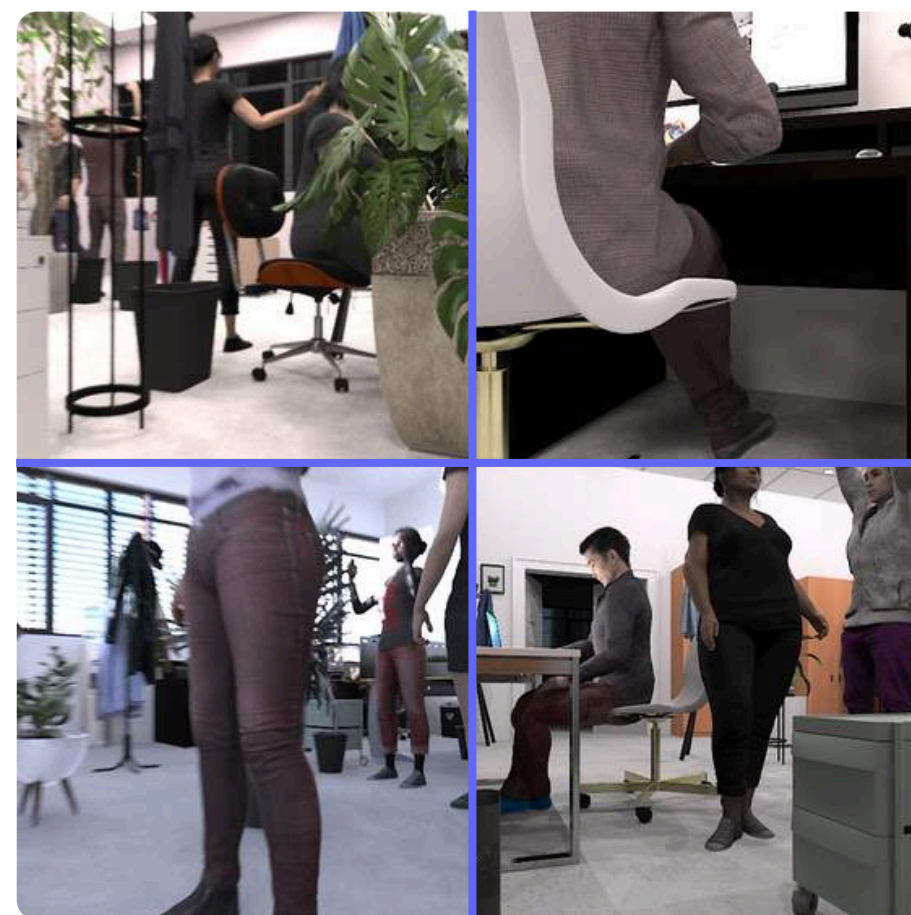


Control all image parameters: lighting, weather condition, activities - **covering unmatched variety of situations**

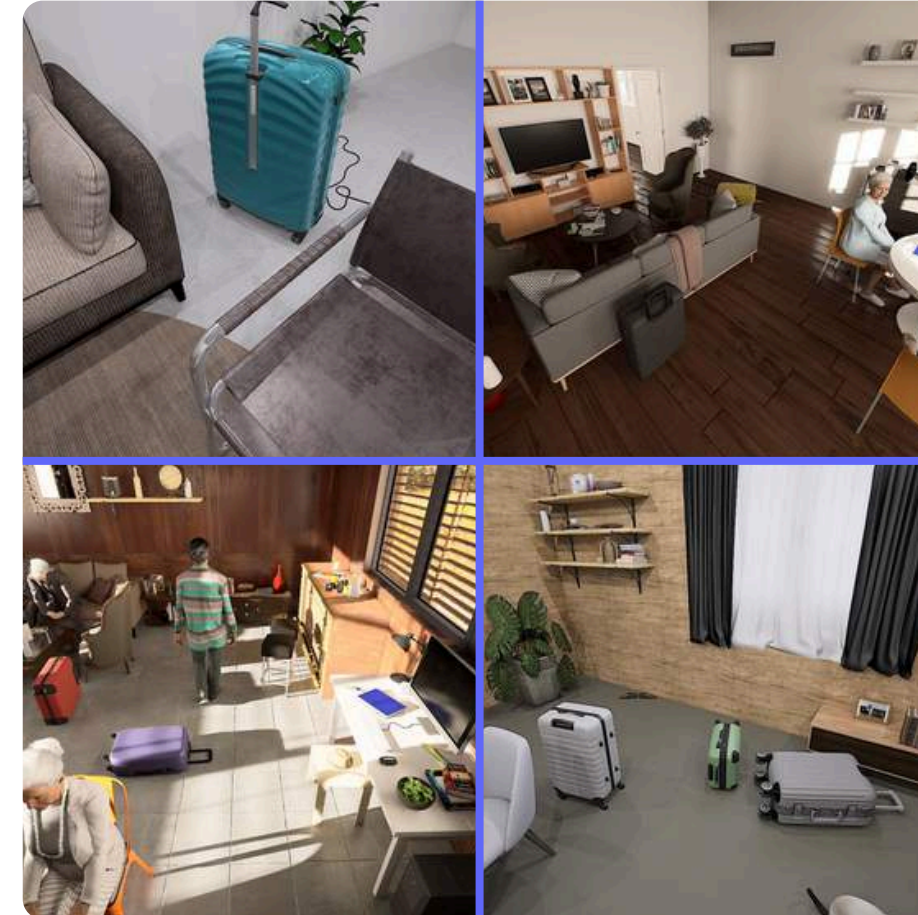
Examples of training synthetic images generated by AI Verse's platform



Fall Detection



Human Detection
in Service Robotics



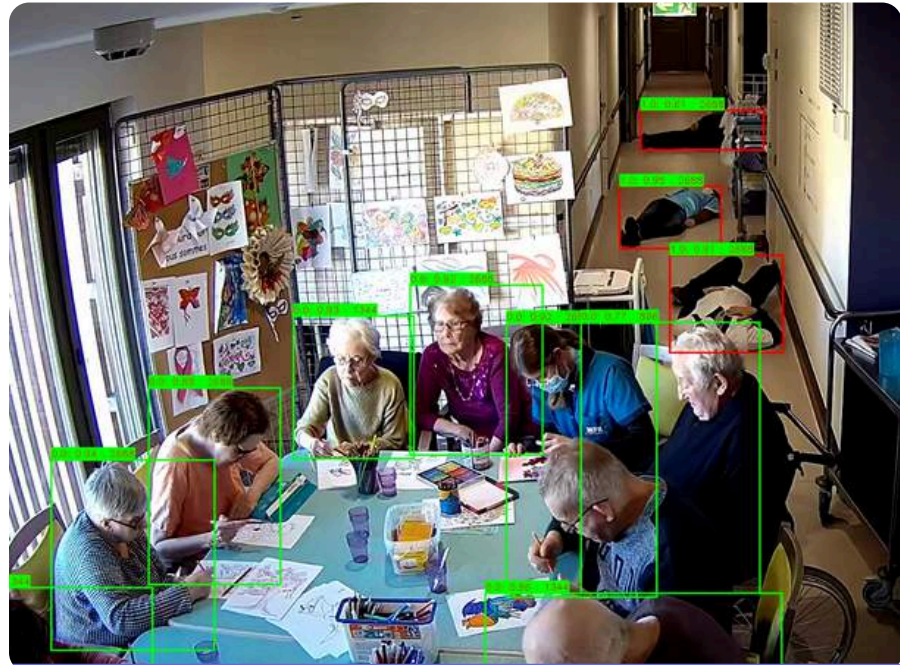
Abandoned
Luggage Detection



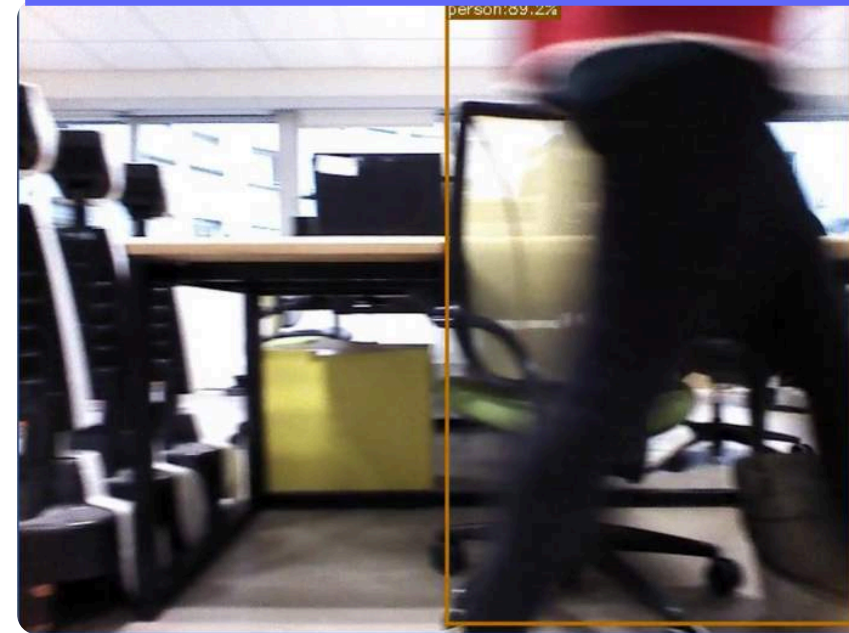
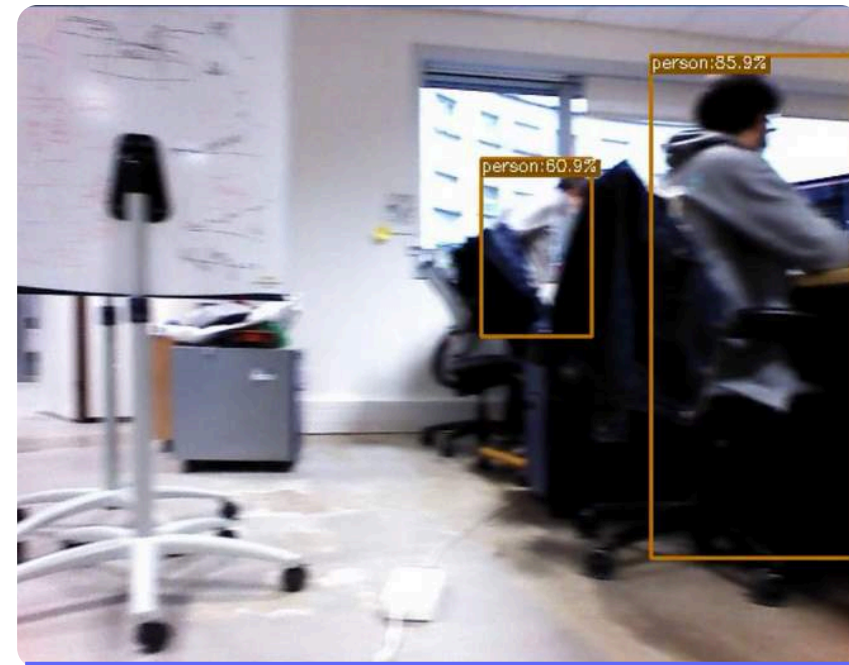
Armored People/Vehicles
Detection

Reach **highly accurate detection results** with synthetic datasets.

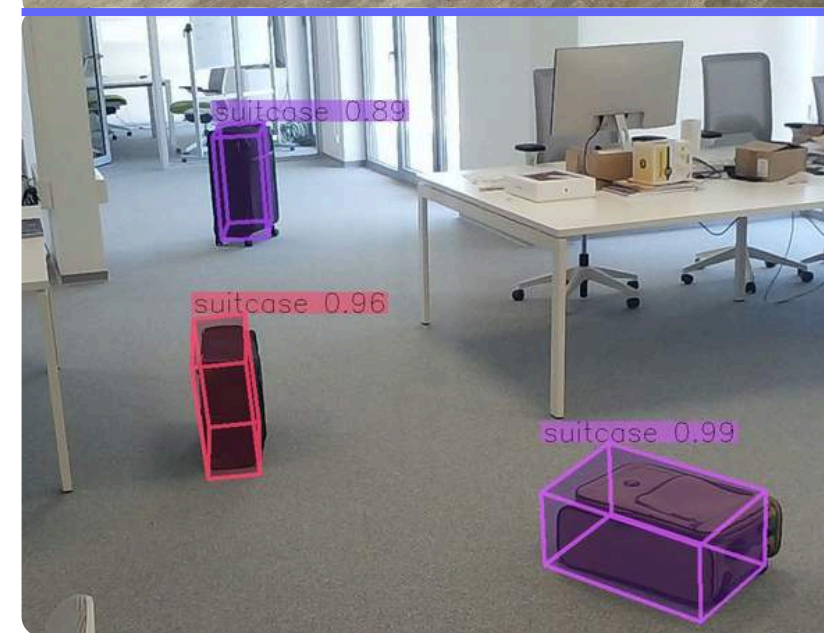
Examples of detection - models trained on 100% synthetic images



Fall Detection



Human Detection in Service Robotics



Abandoned Luggage Detection

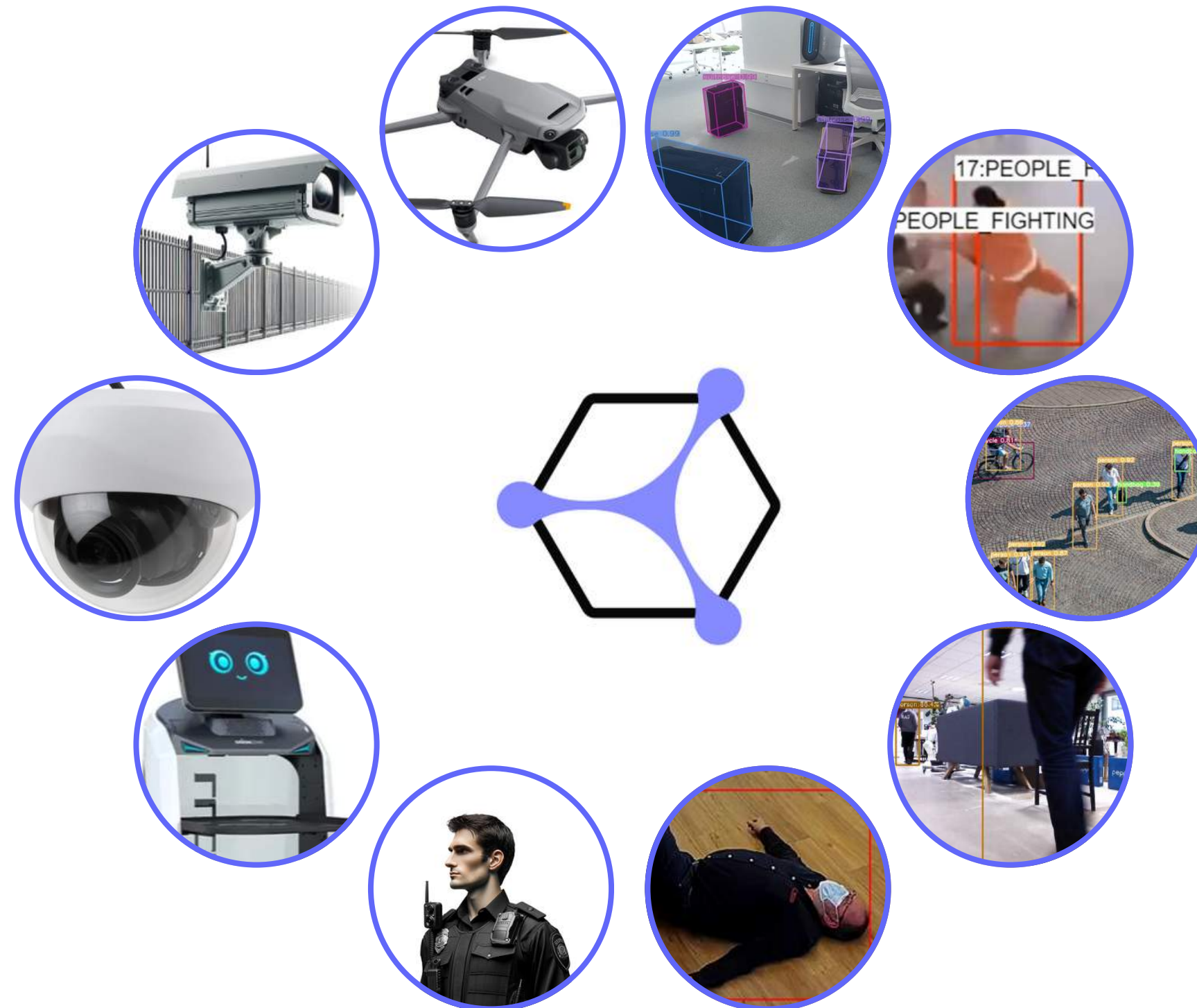


Armored Vehicles Detection



Our solution:

Accurate Detection of Objects and Situations of Interest from various sources.



About Us

Founded in 2020 in INRIA - French Institute for Research in Computer Science.
Raised EUR 3.7M in Seed.

Investors:



Partners:



Location:

Sophia Antipolis, France
Europe's largest Technology
Park

Founders:



Benoit Morisset (CEO)

- PhD in Robotics & AI from LAAS-CNRS (FR).
- Senior Computer Scientist at Stanford Research Institute CEO & co-founder of Pixmap.
- Held a senior engineering position at Apple.



Arnaud Lamorlette (CTO)

- 35 years of experience in the Computer Graphics industry.
- Co-developed the Global Illumination Technology used in Shrek.
- Scientific & Technical Award from the Academy of Motion Picture Arts and Sciences.

Get in touch!



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