AUGMENTA

A tracking technology for creative people

Developed and maintained by THÉORIZ

WHO ARE WE?

In 2012, Augmenta has been designed and developed by the multi-awarded studio THÉORIZ internal engineering team.

During more than ten years, THÉORIZ, has been creating and using Augmenta in a variety of complex immersive and interactive experiences.

Augmenta was a much needed tool for many use cases : live stages, immersive spaces, and interactive surfaces. After 7 years of refining it and using it in house, a new product has been designed focusing on providing a whole end to end solution for any interactive projects.

Discover THEORIZ work

THE TECHNOLOGY

Augmenta is a sensorless tracking solution for creative applications.

Spaces or surfaces of any dimensions can become interactive in an easy way without the need of any additional sensors on the surface or the objects.

The system will provide the coordinates through the network to your creative software of choice, with easy examples to get started.

Being designed for events and permanent installations in mind, the solution contains all the tools for fast deployment, calibration, long-term monitoring and integration by technical teams.
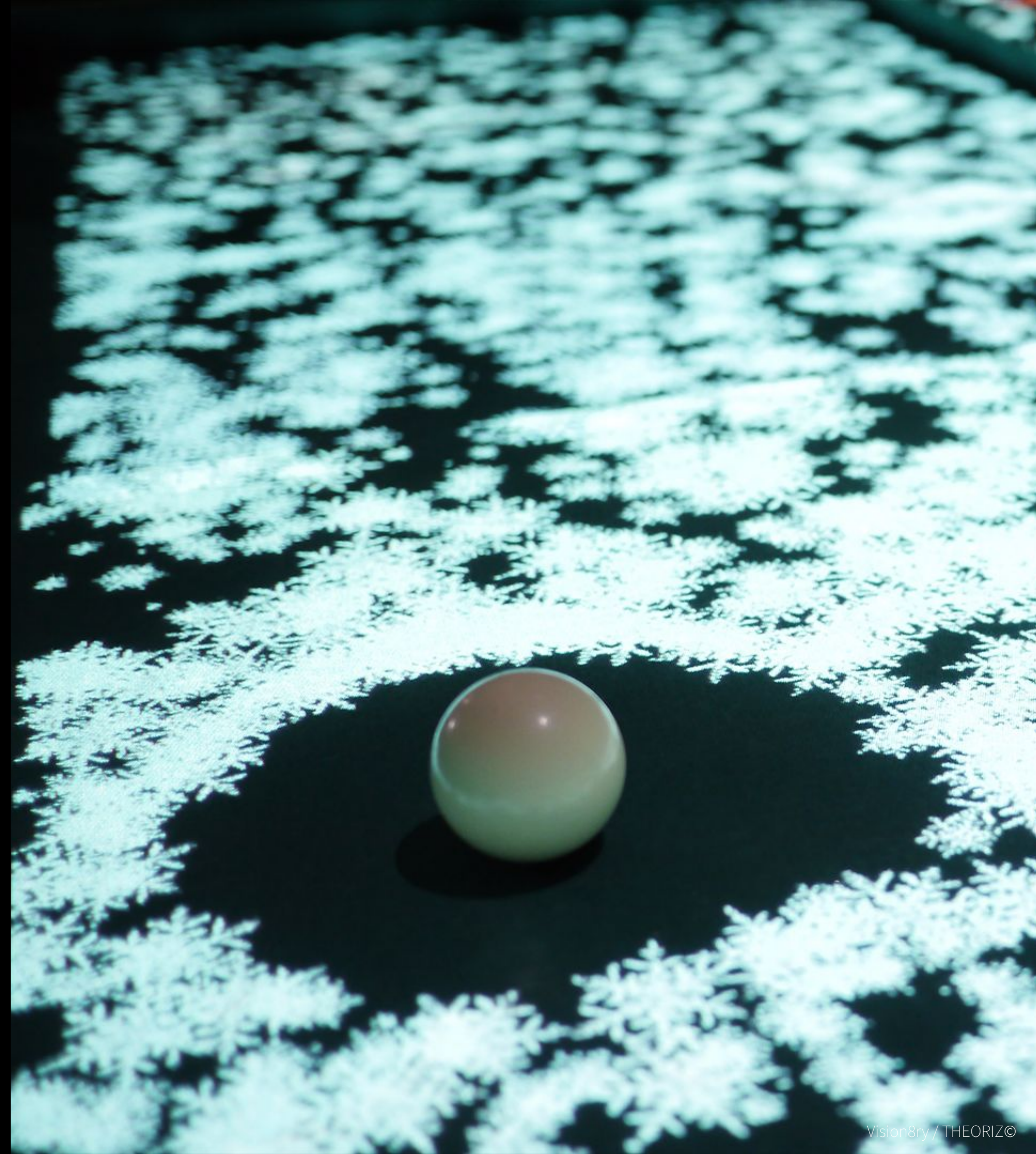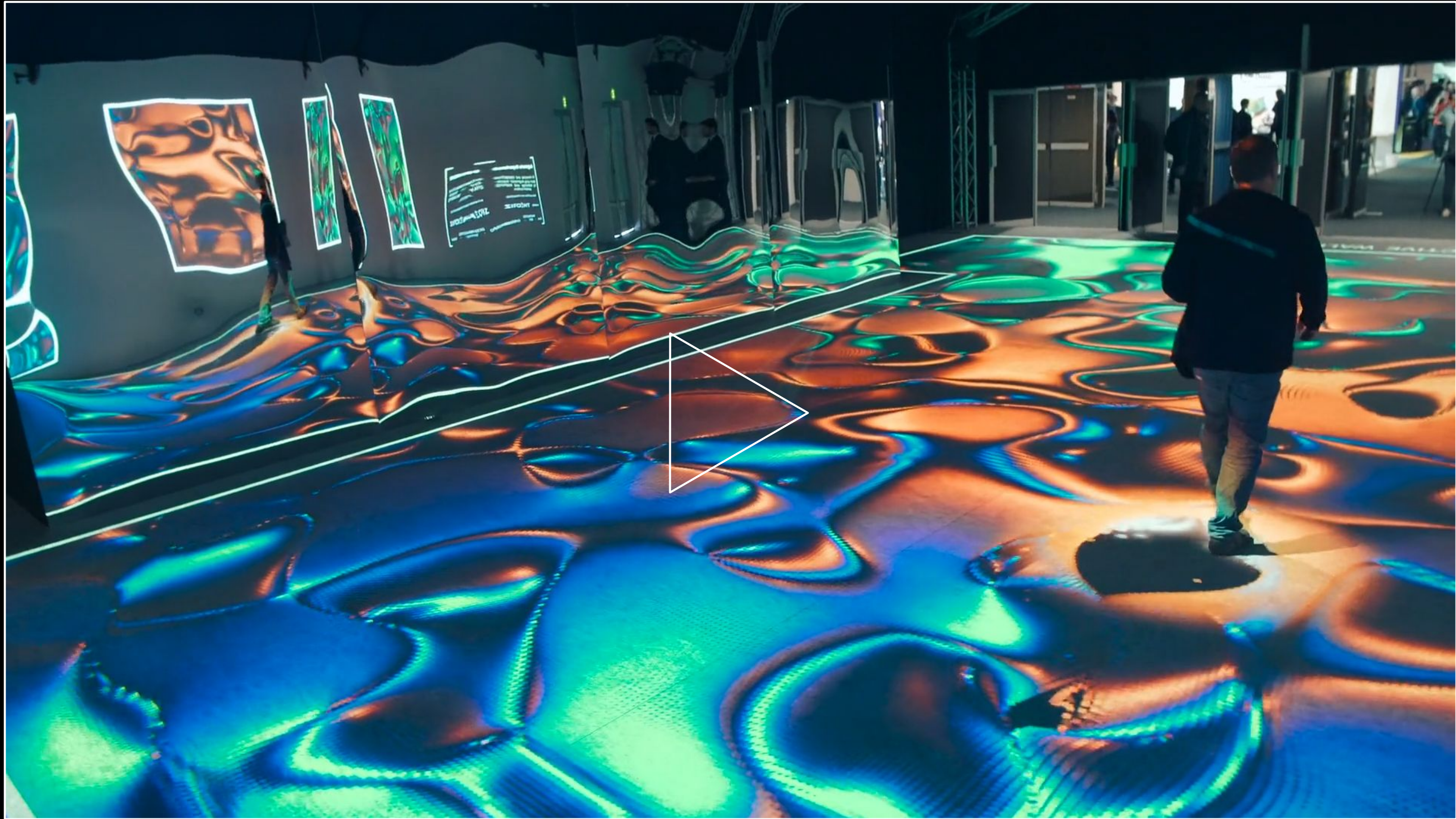
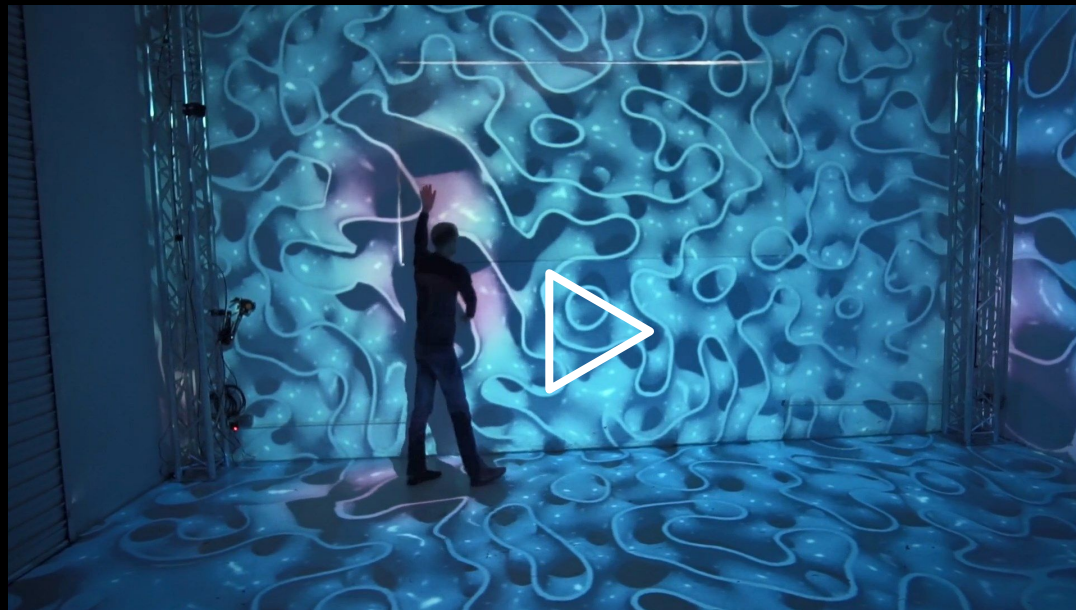Watch Augmenta in action : https://www.youtube.com/watch?v=Bswps0tFLqs

APPLICATIONS

Augmenta can be used for a wide range of applications :

- Theatres and stages

- Events, shows and exhibitions

- Art installations and museums

- Entertainment and amusement parks

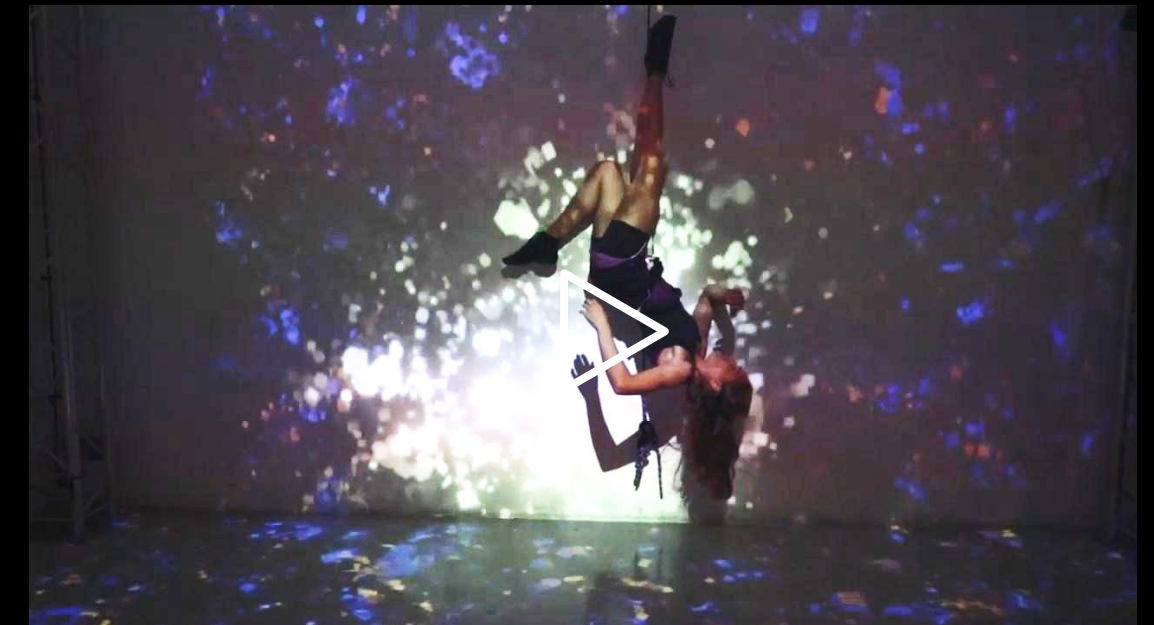- Cinema and audiovisual productions

EXAMPLES

Immersive space research by THEORIZ Studio x IWR
vimeo.com/339124467

Mixed Reality research by THEORIZ Studio
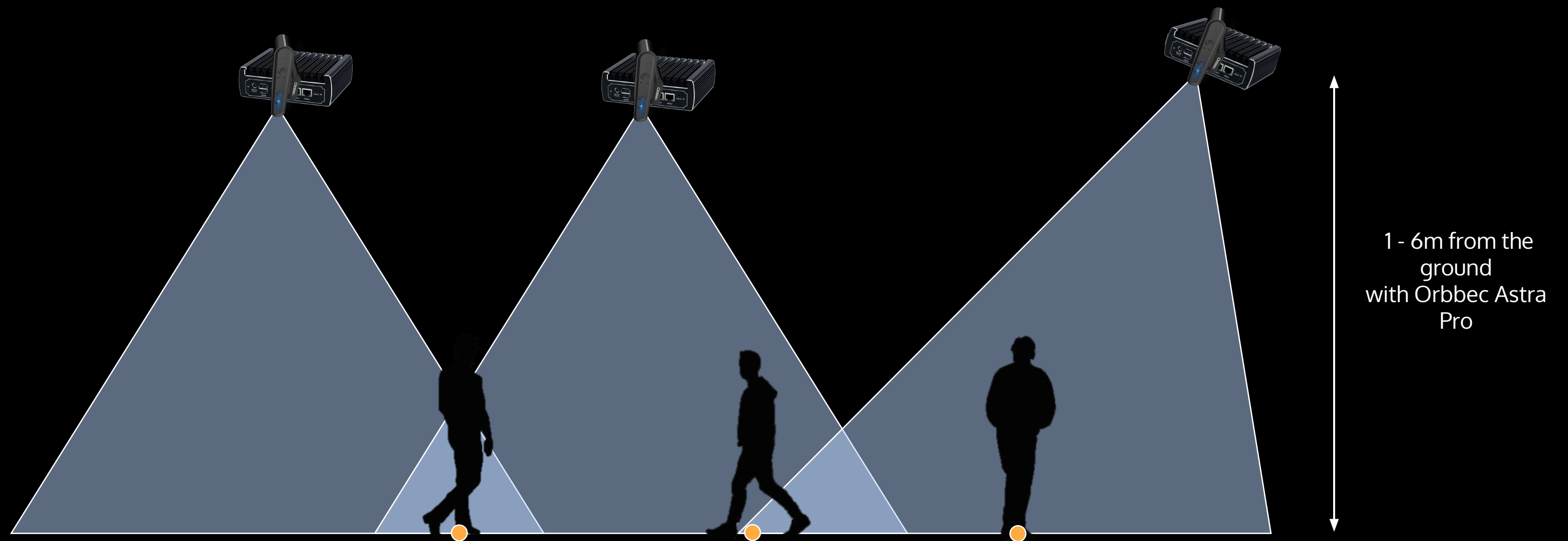vimeo.com/220883711

Vertical dance research by THEORIZ Studio
https://vimeo.com/392671620

Here are some use cases using Augmenta in different setup.

INSTALLATION

Unlimited number of cameras

Cameras can be positioned at an angle

1 - 6m from the ground
with Orbbec Astra Pro

Overlaps are correctly handled

LAN

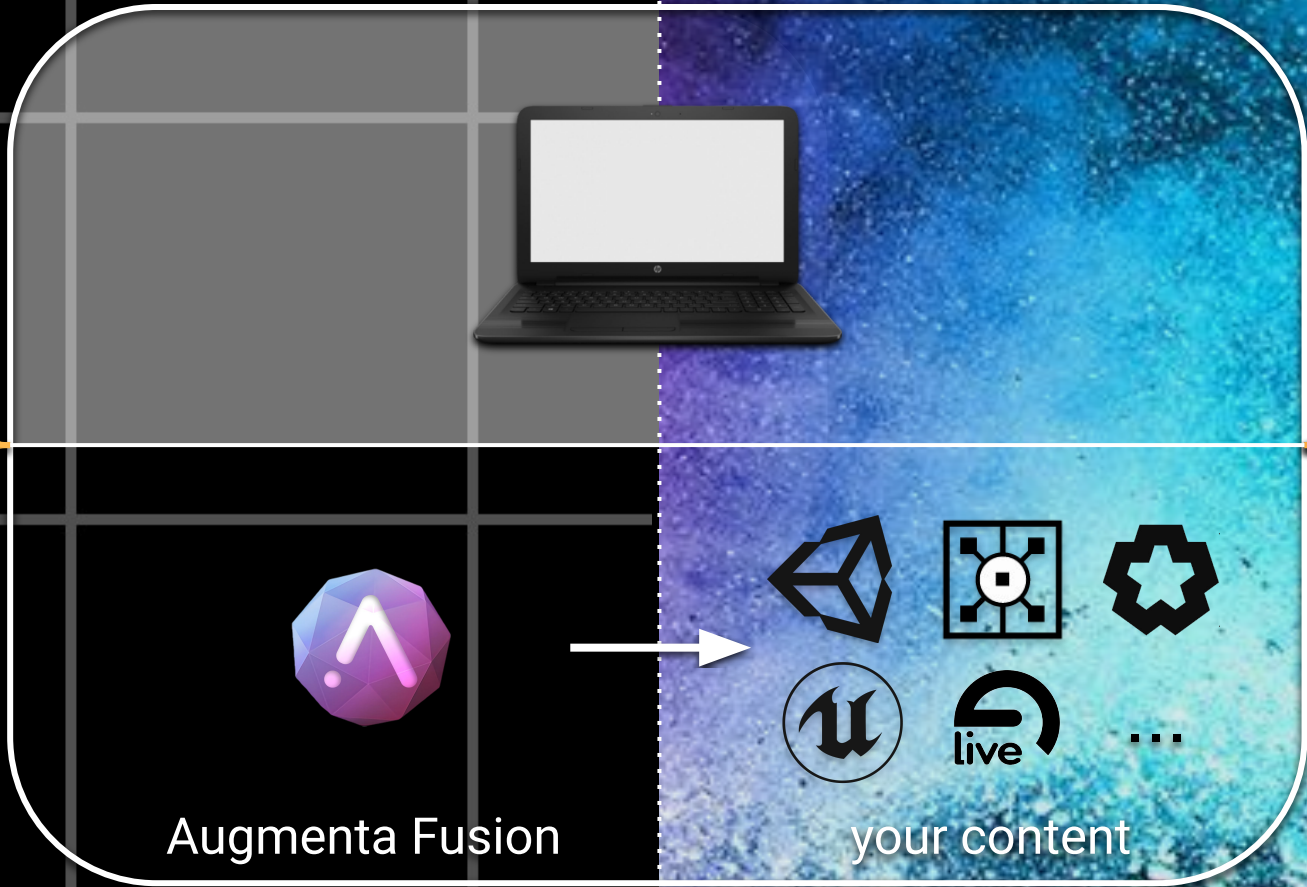LAN

LAN

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Augmenta Fusion

your content
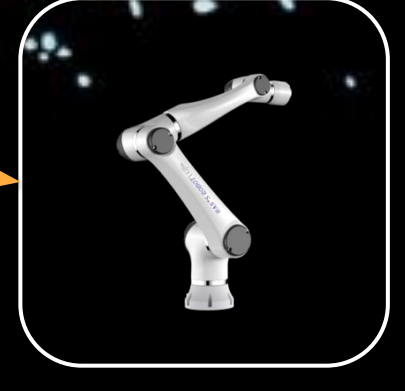
Video
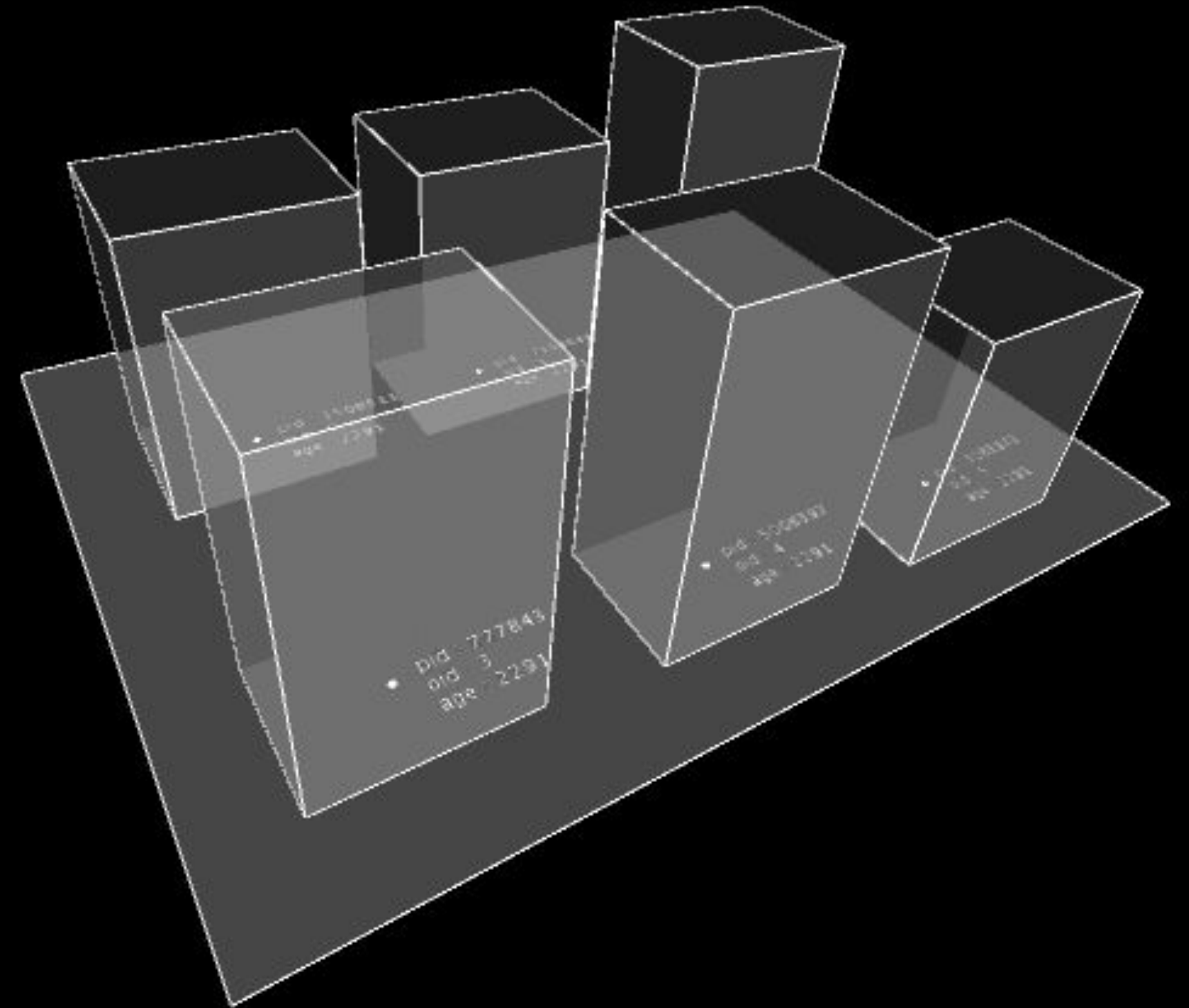
Audio

Light

Other

SYSTEM OVERVIEW

TRACKING DATA

Augmenta provides the 3D bounding box of every tracked objects or people through the network. The main data are :

- Centroid position (x,y)
- Size and orientation of the bounding box
- Speed
- Tracking IDs
- Time spent in the zone
- Number of people

The complete protocols documentation can be found here :

https://github.com/Augmenta-tech/Augmenta/wiki/Data

OSC Tuio WebSocket {JSON}

CONTENT MAKING

You can use any creative software to create your interactive content, Augmenta uses open protocols and is compatible with all the current audiovisual solutions.

We provide a free simulator software to emulate the system, so creators don't have to purchase anything and can do their whole creation from their office.

Simulator download

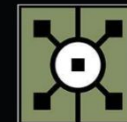Get started easily : we provide community libraries and examples on Github :

https://github.com/Augmenta-tech/Augmenta/wiki

OSC   Tuio   WebSocket   {JSON}

HARDWARE SPEC

AUGMENTA NODE	
Material	Black aluminium (dustproof design)
Noise	0db (Fanless design)
Work temp	-10° / +50°C
Work Humidity	0% / 95% non-condensing
Dimension	155 * 126.5 * 52.5mm
Hanging	VESA bracket or light hook
Remote boot	Electricity and WOL enabled
Remote access	Web interface
CPU / RAM / Disk life expectancy	~10 years (industrial grade)
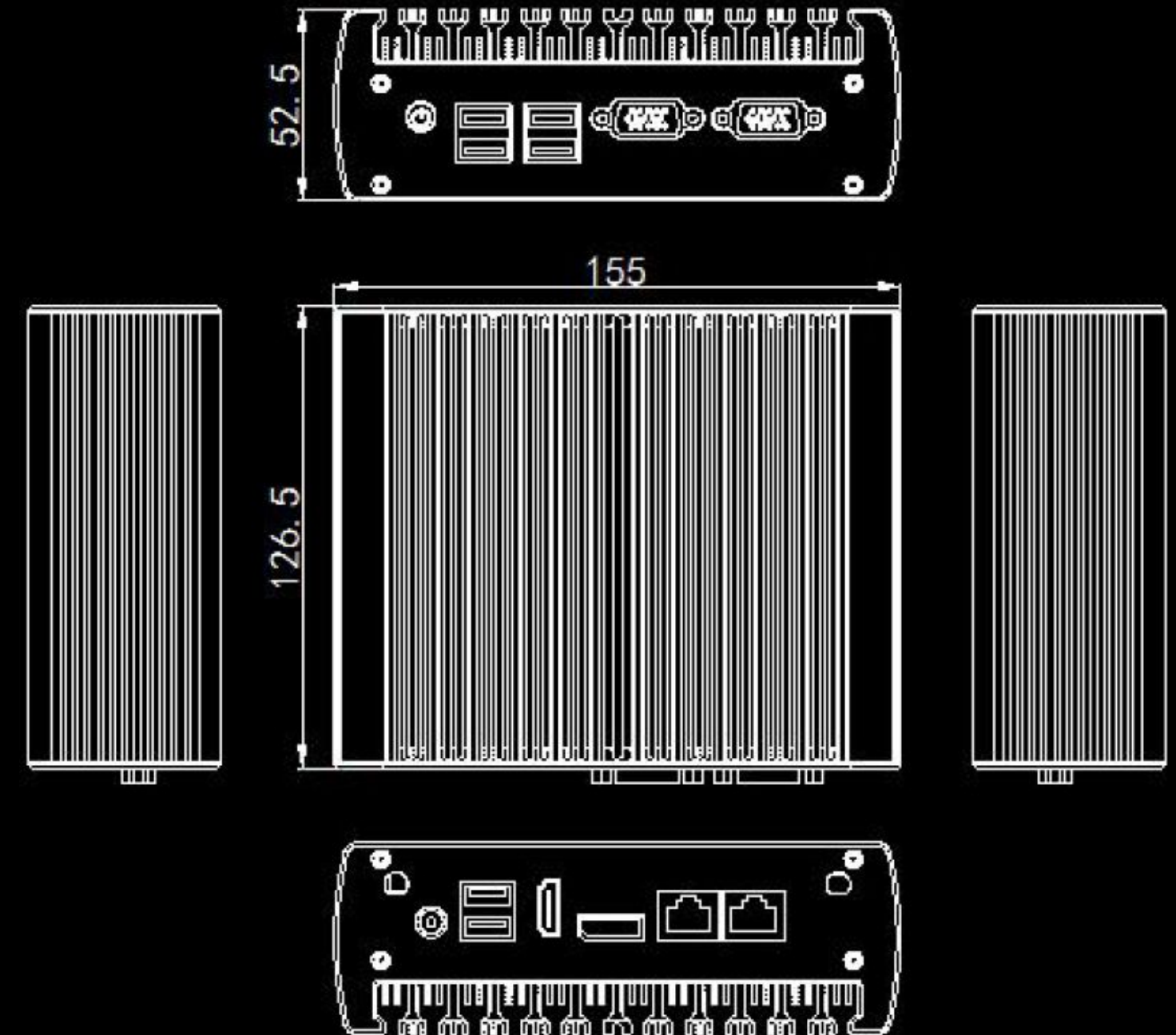
The nodes are industrial computers that are fully tested in house before delivering to be suited for both temporary or long term permanent use.

THANK YOU!

∧UGMENTA
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THÉORIZ

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