



**Infinite Foundry**  
3D Digital Plant

# Shaping the Future



**Infinite Foundry**  
3D Digital Plant

*Delivering efficiency and innovation*

**DIGITAL TWINS AND THE INDUSTRIAL METAVERSE**



# Customers



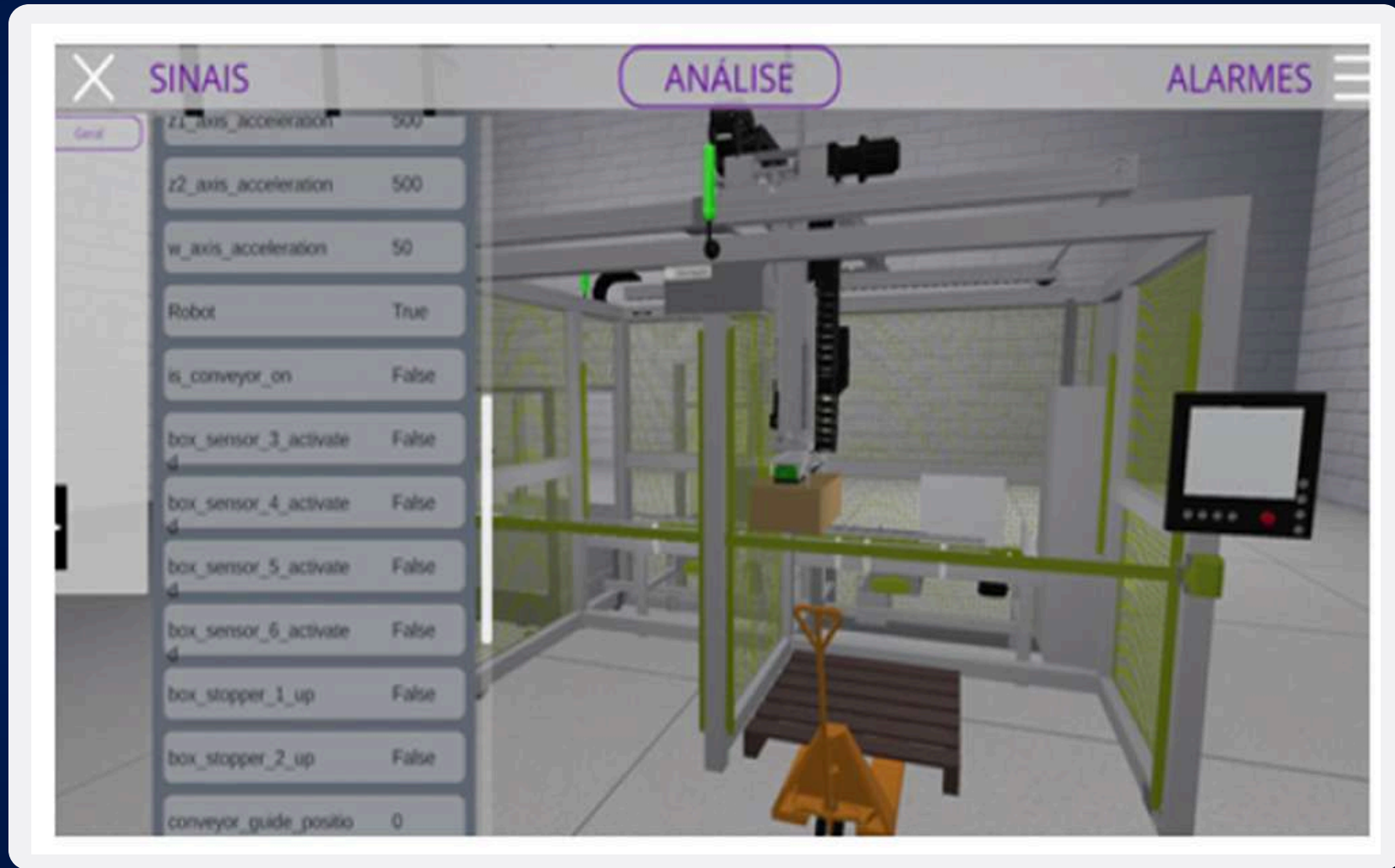
# Partners





# THE TECHNOLOGY

## Gaming as Engineering tools



IoT in 3D Context

Physics Calculation in Real Time

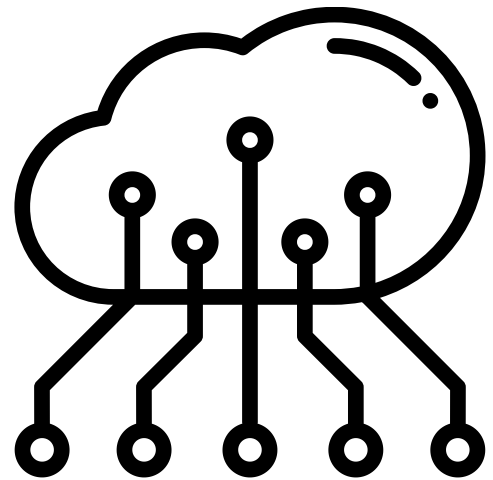


# INFINITE FOUNDRY - CONCEPT

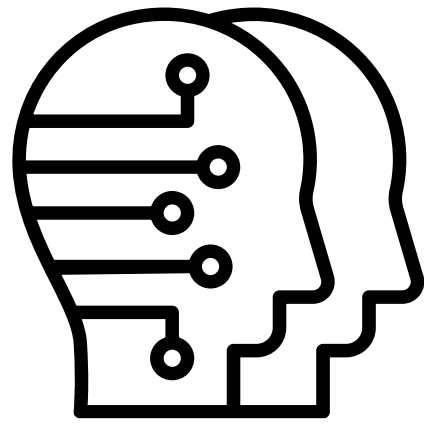


*Real time*

Input Data



Digital Twin



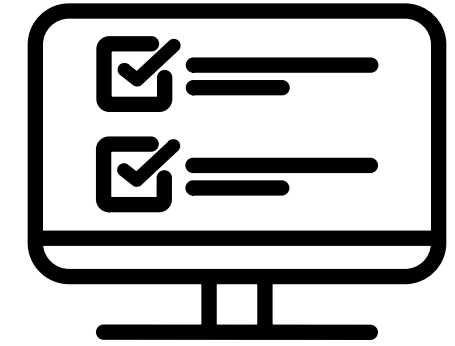
 Unity

Calculations



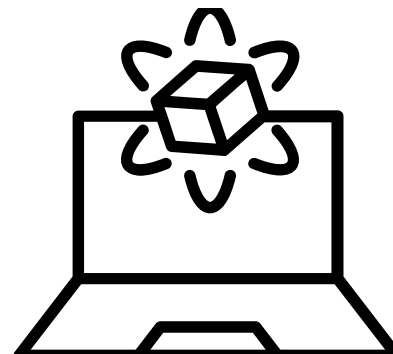
Open  $\nabla$ FOAM + AI

Output Results



 Unity

DYNAMIC SIMULATION

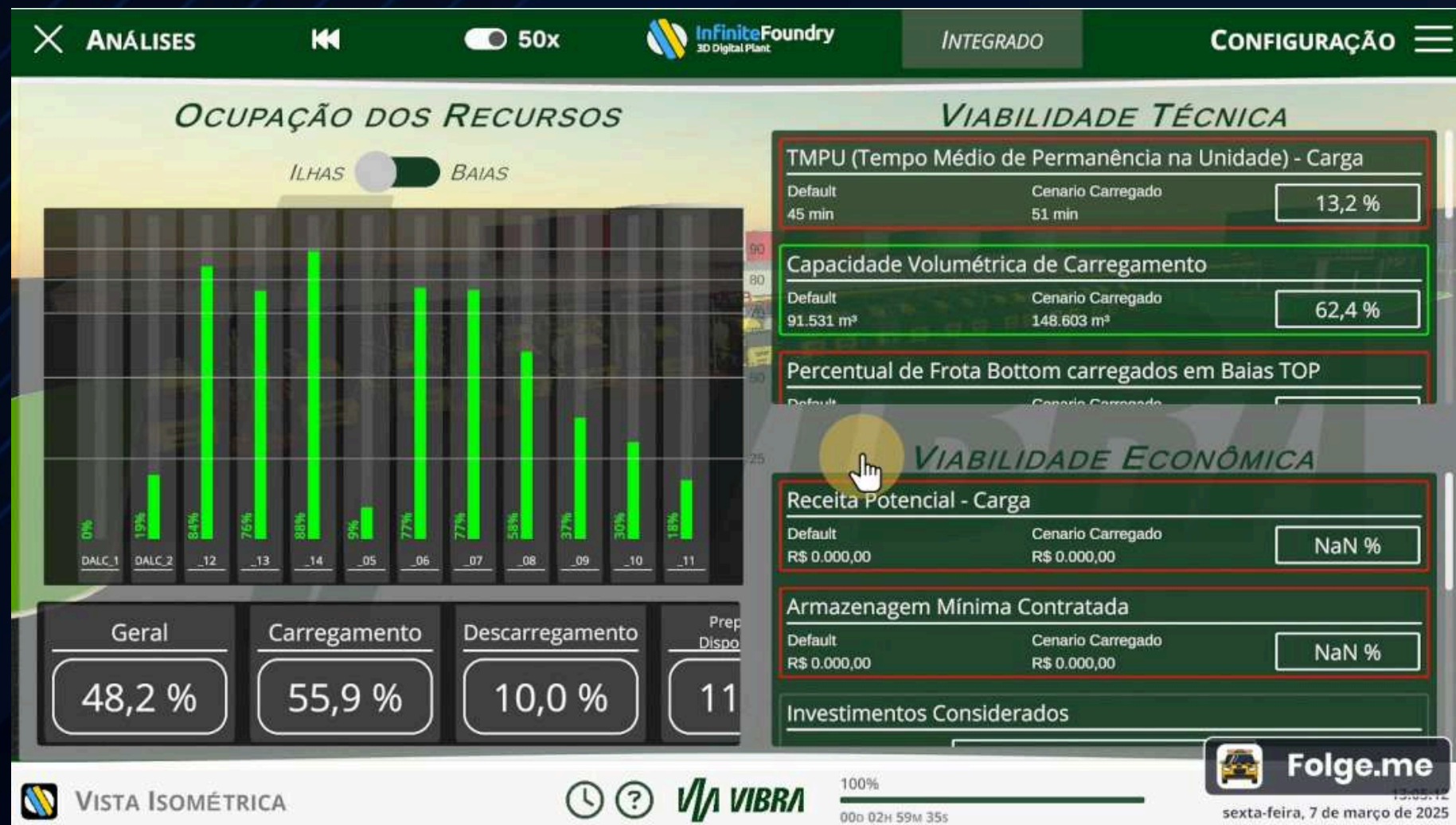


# USE CASE REFERENCES

## VIBRA – DIGITAL TWIN

Digital Twin focused on operational excellence, leveraging AI and simulation to validate investments, optimize performance, and assess regional footprint across different modalities.

## KPIs IMPROVEMENTS



## VIRTUAL COMISSIONING



## REAL TIME CENARIOS





# USE CASE REFERENCES

## EFACEC- DIGITAL TWIN

Virtual operational training with real-time ergonomic analysis and high-fidelity process simulation for Efacec. A digital twin that unifies operation, safety, and performance.

## RENDERING SIMULATION & VALIDATION



## VIRTUAL TRAINING



## REAL-TIME OPERATION PROCESS



# USE CASE REFERENCES

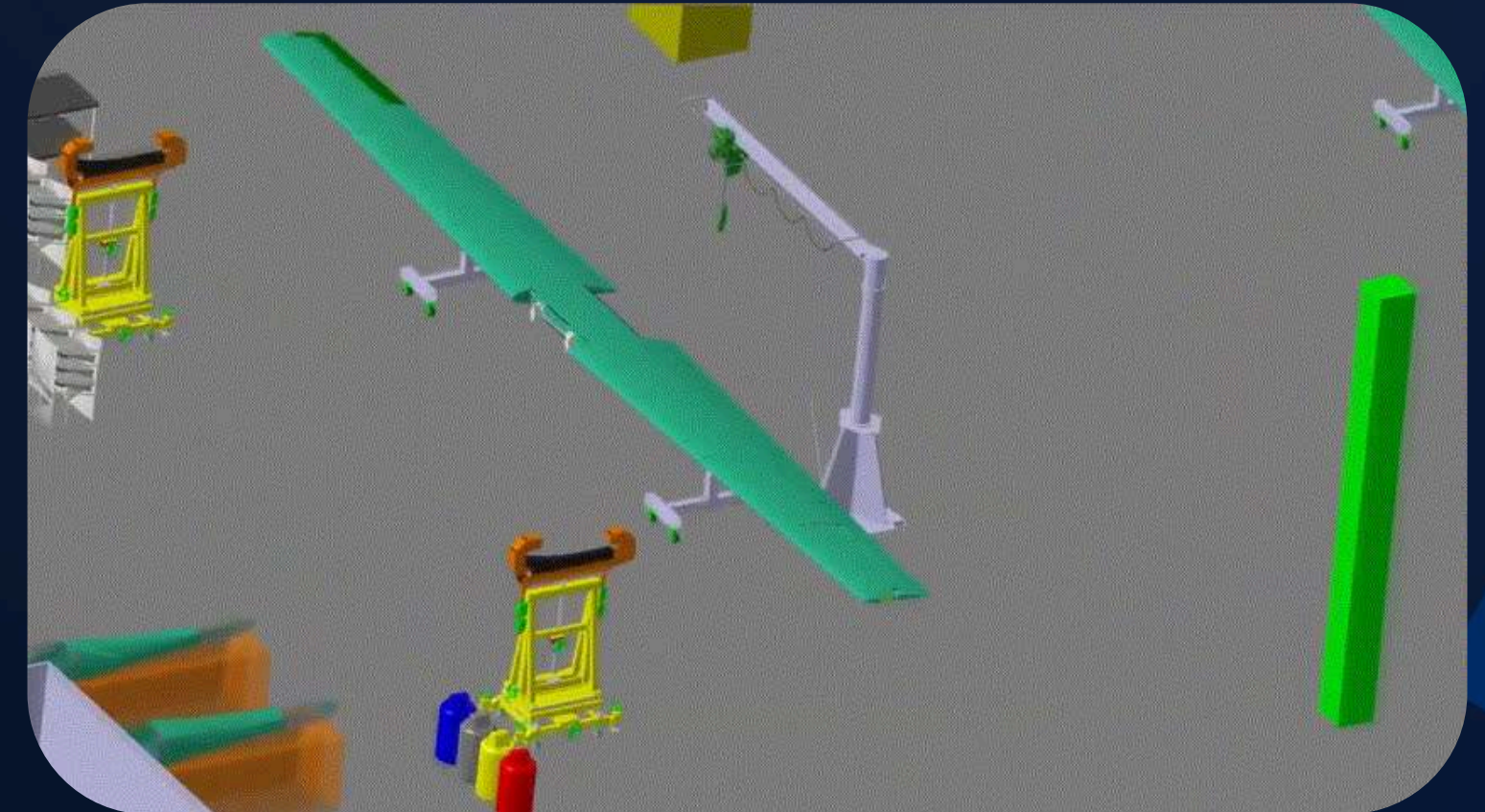
EMBRAER (EVE) - NEW FACILITY

eVTOL Facility: Simulated Scenarios, Smarter Investments  
Investment cost avoidance in CAPEX

## End-to-End PROCESS OPTIMIZATION



## Digital Twin PRODUCTION LINE



## RENDERING TO VALIDATION



# USE CASE REFERENCES

DIGITAL TWIN - ELECTRICITY SECTOR

Industrial Metaverse in Substations

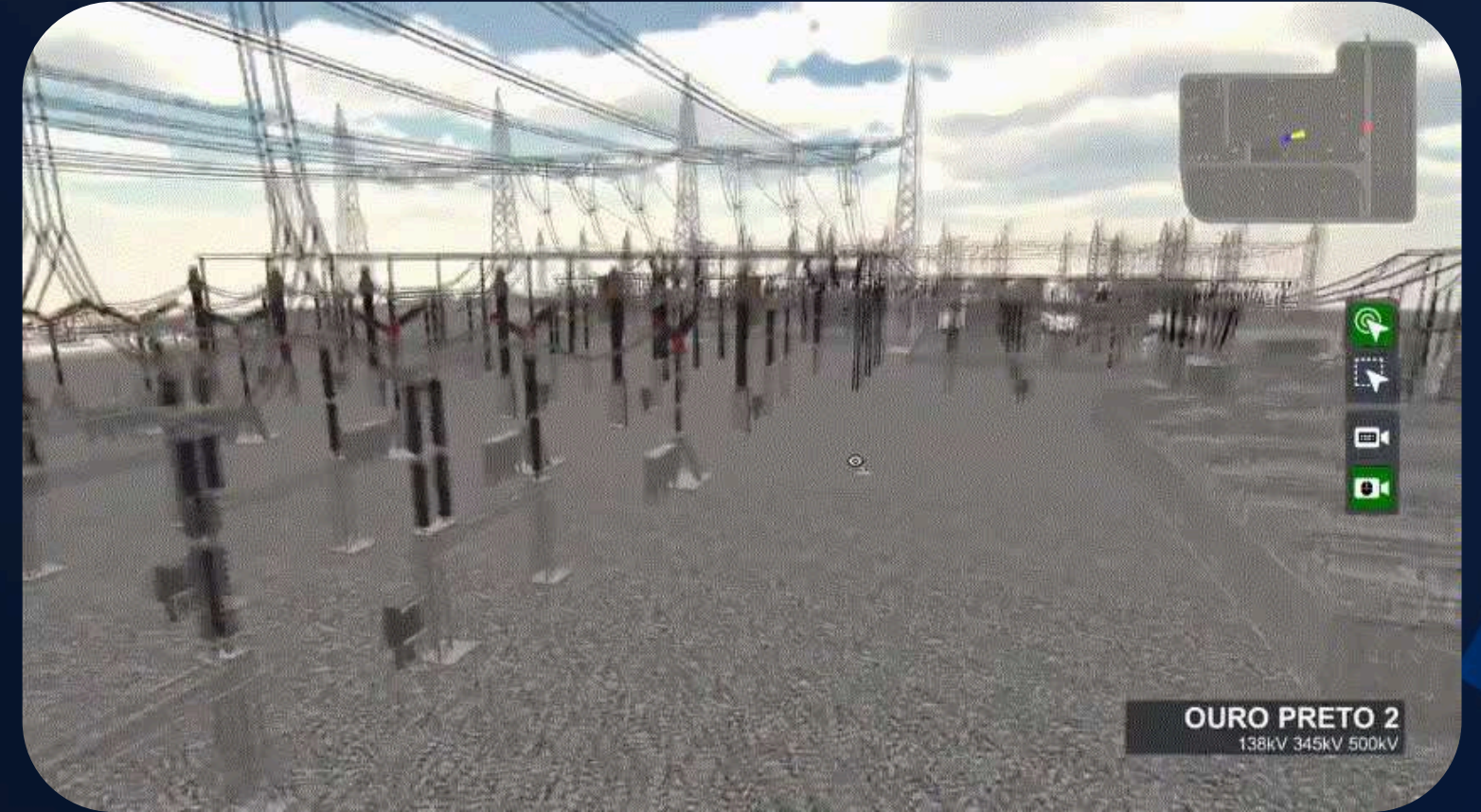
Digital + Physical Integration

- Virtual Commissioning
- Contingency Planning

## RENDERING



## VIRTUAL COMMISSIONING



## DIGITAL TWIN



# USE CASE REFERENCES

DIGITAL TWIN - ELECTRICITY SECTOR

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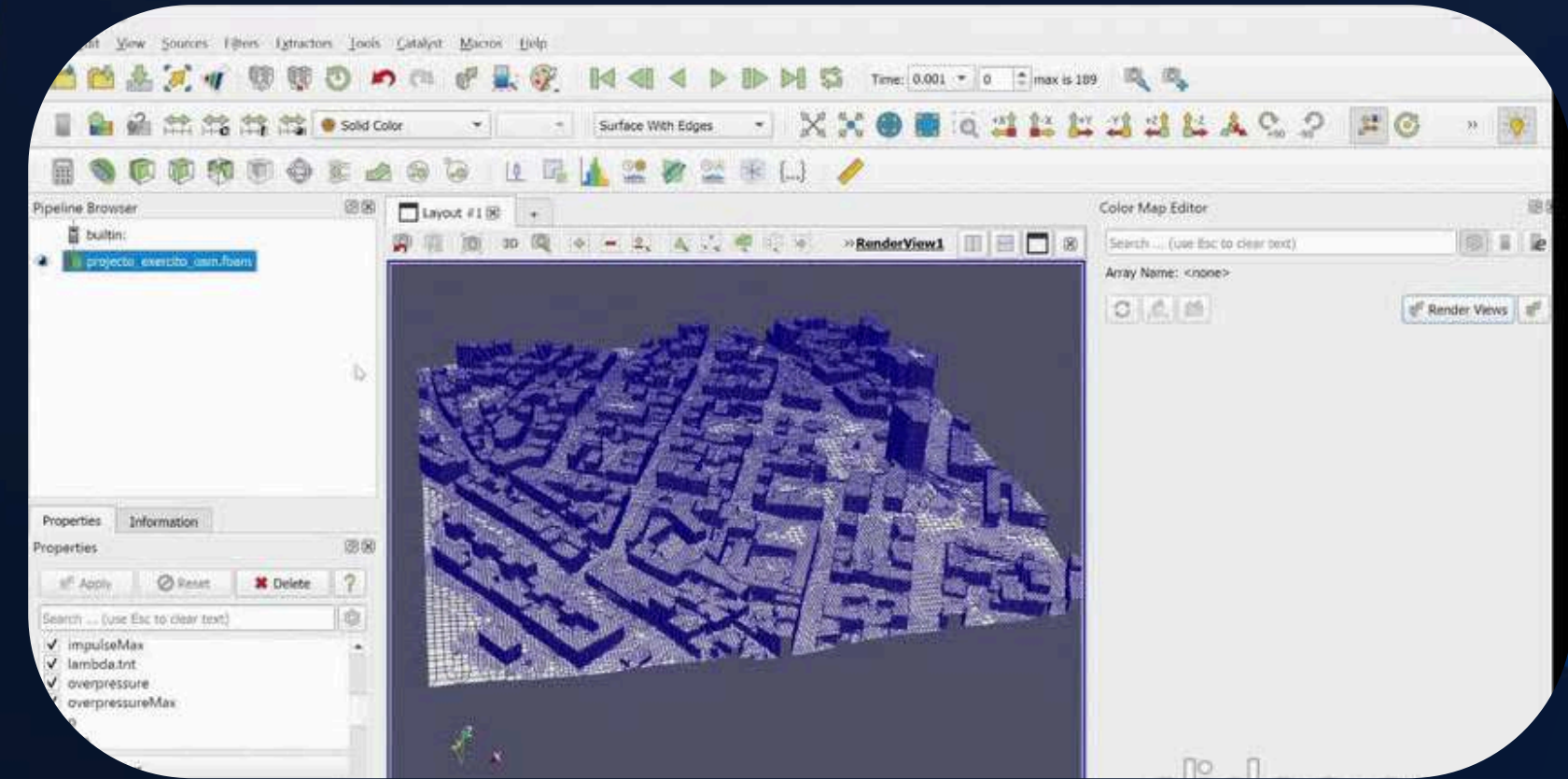
Digital + Physical Integration

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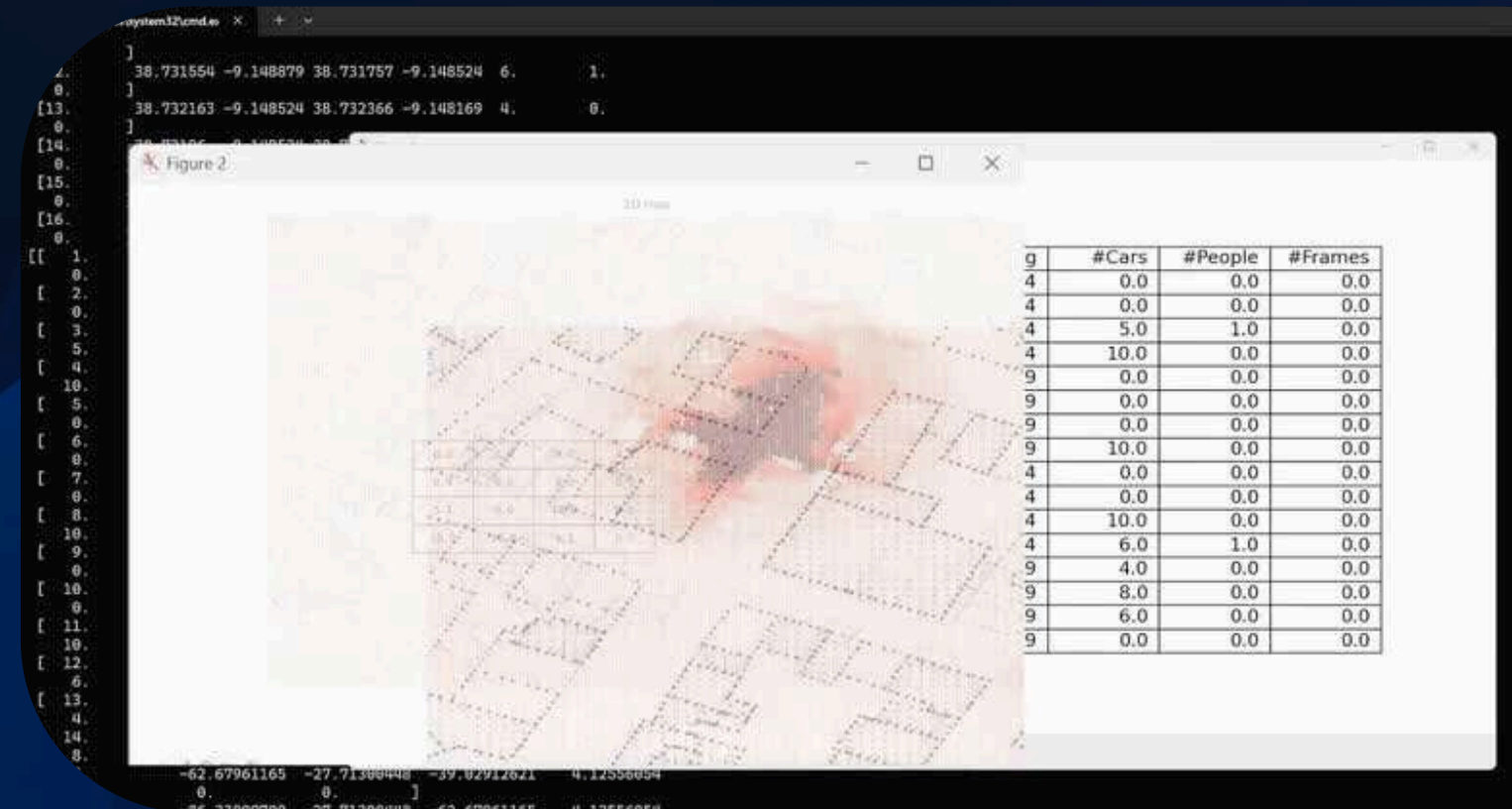
## RENDERING



## VIRTUAL COMMISSIONING



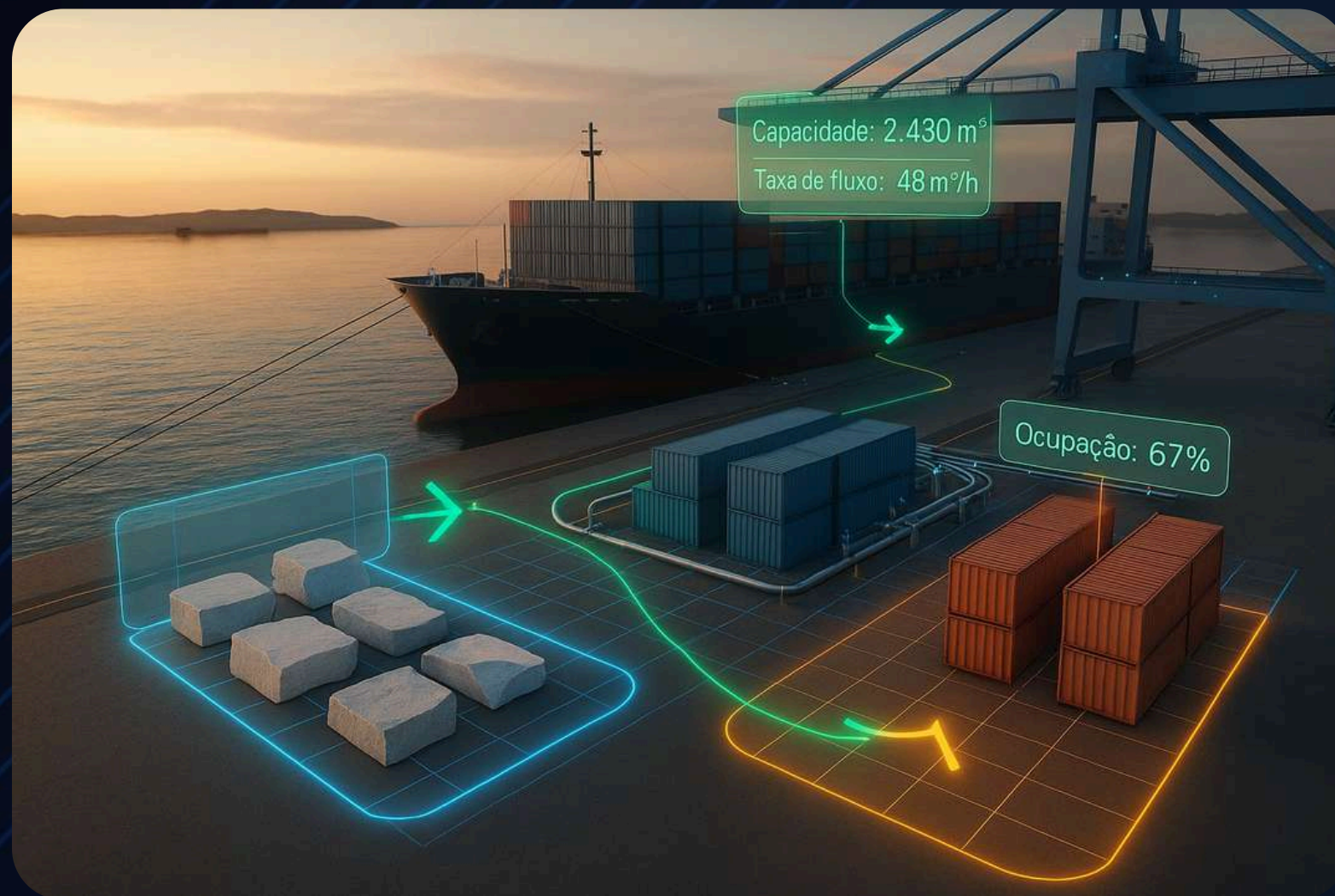
## DIGITAL TWIN





# Digital Twins for Port Yard Optimization

3D modeling and automatic disposition optimization of loads — metallurgy, natural rocks, and containers



## Infinite Foundry methodology applied to port sector:

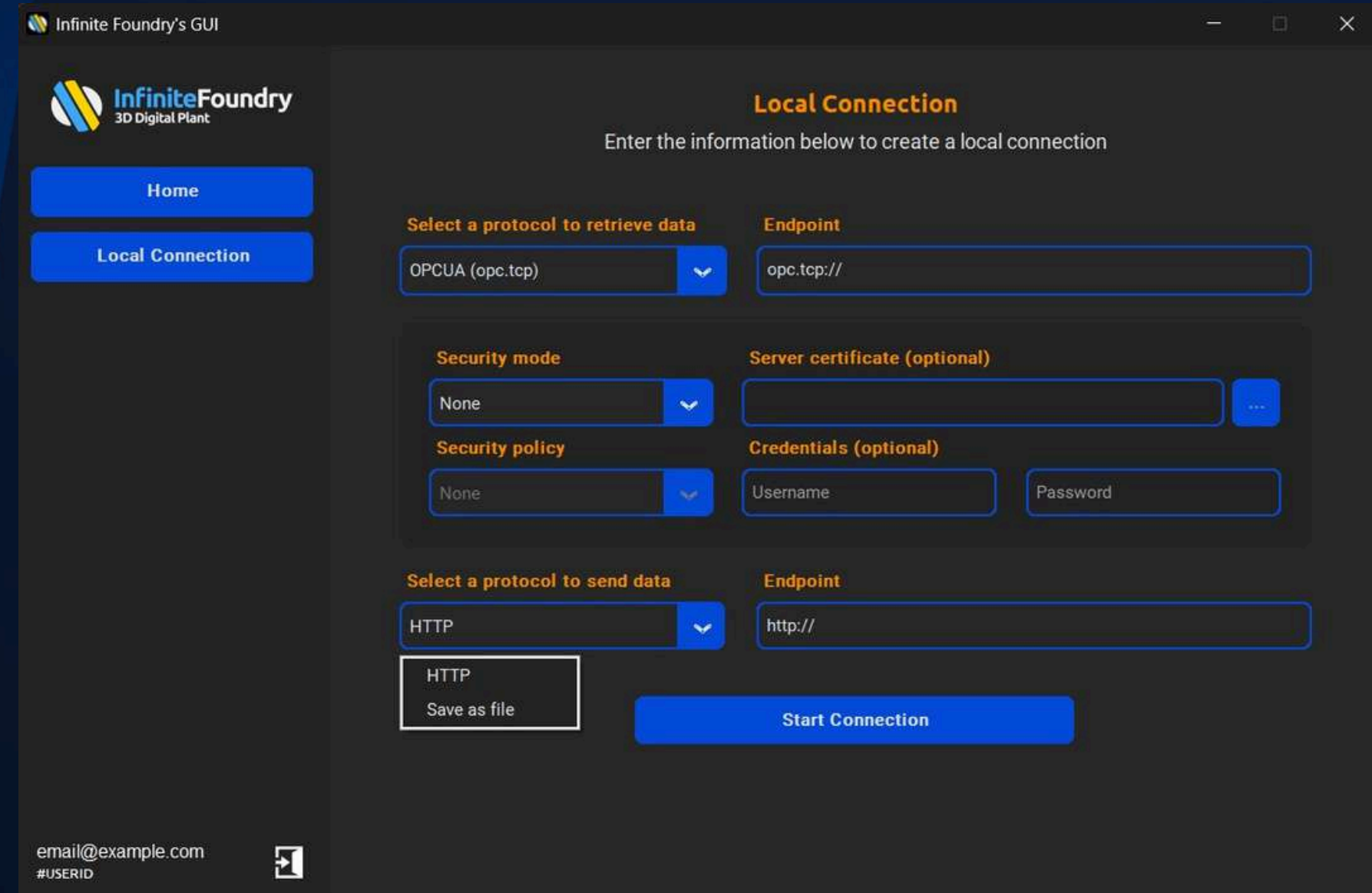
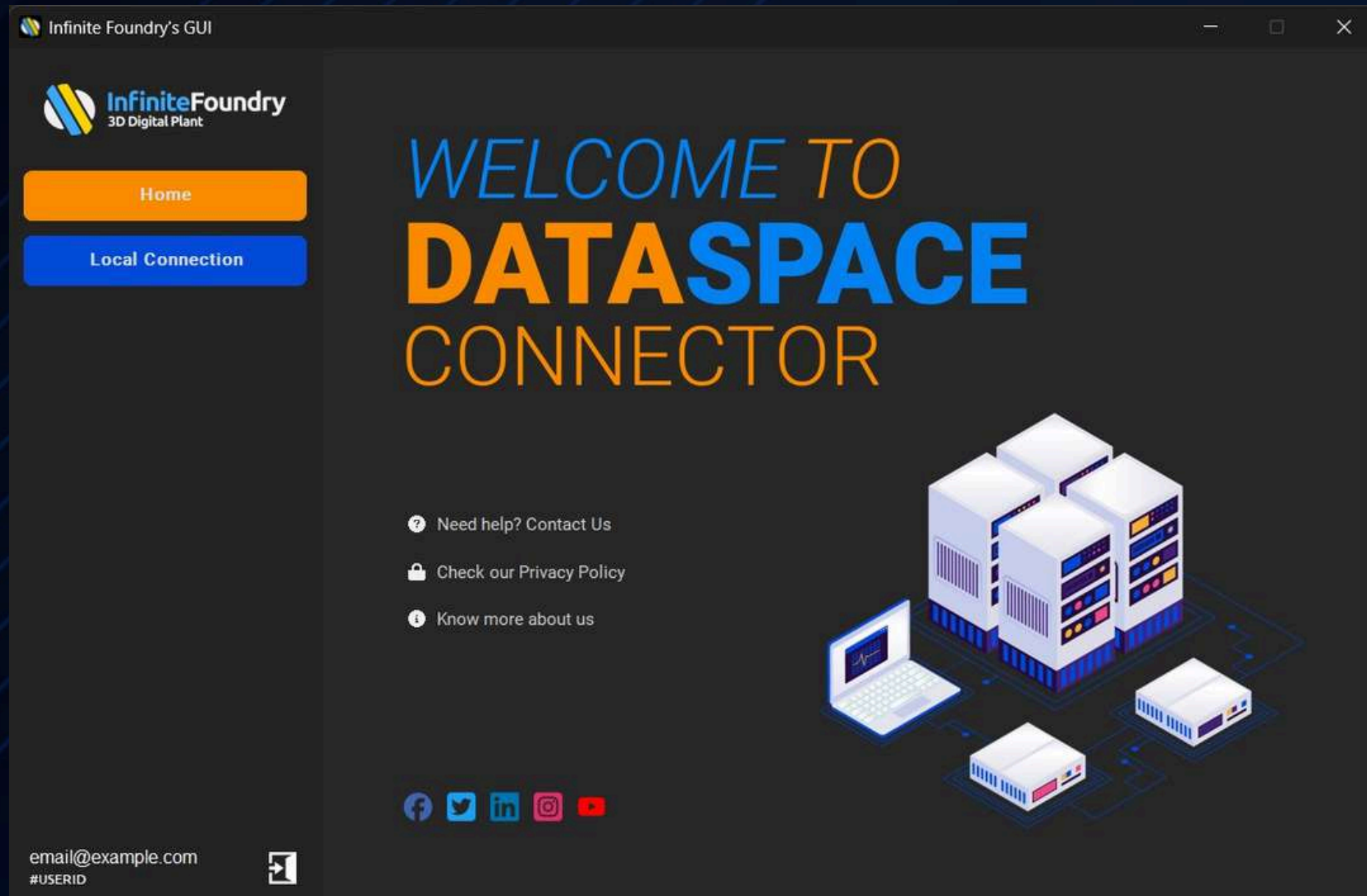
- Automatic 3D models of standardized loads (metallurgy, rocks, containers)
- Digital twin of the yard, integrating real dimensions and operational constraints
- Intelligent simulation of stacking, routes and movement areas
- Automatic yard occupancy analytics optimization gain of up to 25% in space utilization efficiency
- Integration with port and IoT systems for real-time updates

**"Turning port yards into intelligent digital environments — more space, efficiency, and predictability."**

# NEW RELEASES

INFINITE FOUNDRY DATA SPACE CONNECTOR

## ENTERPRISE DATA CONNECTION PRODUCT ID



- Connector
- Federated Catalog
- Identity Hub
- Registration Service
- Data Dashboard (Management UI)
- ISO 27001 SPECS

## Partners



# Improved sustainability tracking

## Sustainability Scoring Powered by Digital Twins

### Product Specific

*Personalized scoring for each product or production line, allowing for personalized communication.*



### Data-driven

*Incorporates life cycle analysis for a unique sustainability passport*



### Real Time

*Calculated using reliable data from digital twins without additional sensors or manual input.*



### Life cycle analysis

*Differentiates products and services based on their entire production journey.*



# Virtual sensors

*Benefits and advantages*

## Customization

*Customized calculations for all operating parameters*

## Traceability

*Full process visibility increases accuracy and control*



## Process knowledge

*Holistic insights optimize efficiency and sustainability*

## Scalability

*Reduces reliance on physical sensors, enabling cost-effective scalability*



**From the individual challenges  
of each operation...**

**... for a zoom out across the entire  
value chain.**

# MISSION

*Deliver efficiency and innovation*



## DIGITAL

Traceability of  
parameters throughout  
the operation

## LEAN

flexible  
efficient  
Troubleshooting

## GREEN

Save resources  
Increase process  
sustainability

# WHERE WE ARE.



**Founded in 2017**

- **32 employees**

*Amazon, BR  
Sustainability and  
well-being*



*Vitória - ES  
R&D*

*São Paulo - SP  
Modeling Animation and  
AI*

*Porto, PT  
AI and Simulation*



# OUR TEAM

Behind every groundbreaking project is our team, where creativity meets expertise.



Bruno Eisinger  
Co-founder



André Godinho  
Co-founder



Joao Eisinger  
Manager



Arthur Fernandes  
Senior Unity Developer



Gustavo Caralli  
Project Manager



Dieyniele Andrade  
Head of Business and Controllershship



Giovanna Paulussi  
Software Engineer



Fabrini Ribeiro  
Legal Manager



Théo Santo  
3D Developer



Felipe Cesar  
3D Developer



Gustavo Santos  
BIM & CAD Designer



Samuel Costa  
Automation and Industrial Solutions Technician



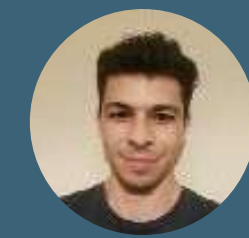
Lucas Fernandes  
CAE Engineer



Vasco Ferreira  
Data Scientist



David Carvalho  
Data Scientist



Fábio Ferreira  
Data Scientist



Karyna Yurchenko  
CG Generalist



Carlos Fernandes  
Full Stack Developer



Nicolas Firmino  
3D Designer



Fernanda Schultz  
Accountant



Julia Elisa  
BIM



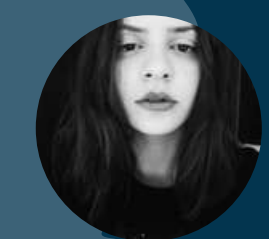
Vitor Hugo  
Software Developer



Gonçalo Garganta  
Data and Robotics Scientist



Guilherme Carvalho  
Software Developer Rendering & Simulation



Maria Cabral  
3D Graphic Designer and Developer



Diogo Campas  
Computer Vision & Machine Learning Specialist



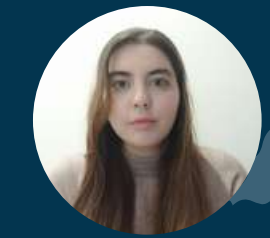
Kelly Machado  
Software Engineer



Isabela Gomes  
CAE Engineer



Victor Araujo  
3D Solutions Engineer



Bruna Bento  
Functional Operations Analyst



Rita Magalhães  
Project & Community Manager



Mário Travassos  
3D Software Engineer



**InfiniteFoundry**

*delivering efficiency and innovation since 2017*