



THE YDREAMS[®] COLLECTION (TYC)

The media track for a future documentary on the YDreams[®] story.
Celebrating its 23 years and a half anniversary.



THE YDREAMS[®] COLLECTION (TYC)

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MAJOR SOFTWARE PLATFORMS

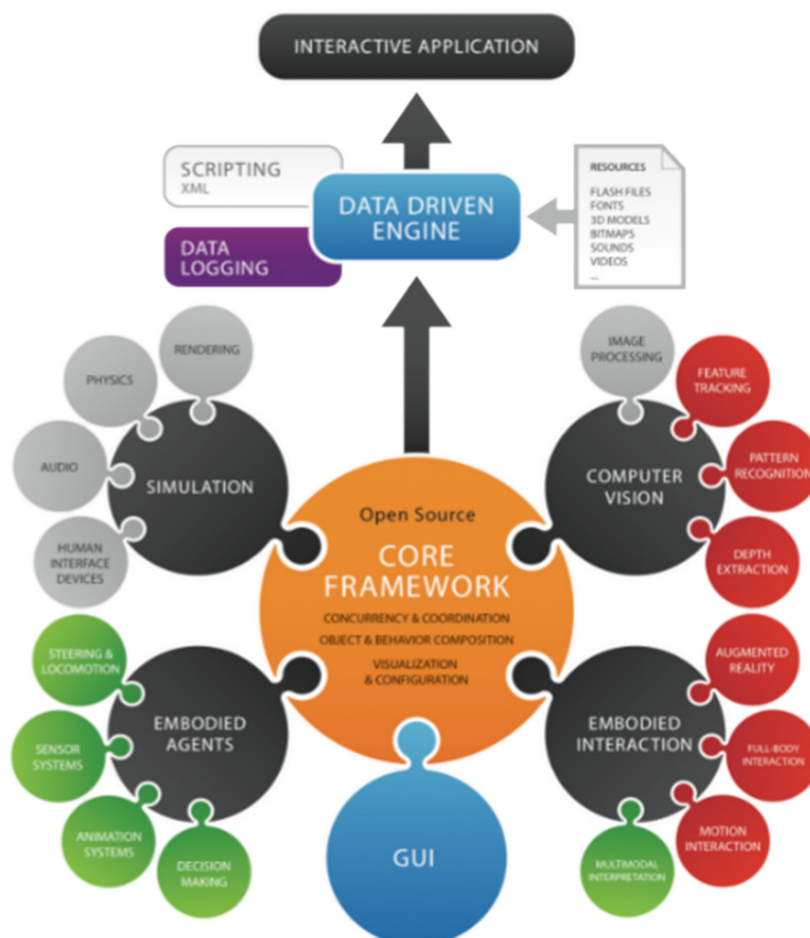
YVISION

Yvision was created by a **Y Labs** team at **YDreams**. It was probably the first spatial computing platform integrating AI, AR, VR and robotics.

Its underlying composition framework is described in this original paper [LINK](#) 🖱️

Yvision was used to develop hundreds of projects for 50+ Fortune 500 companies. Illustrative applications are shown in [LINK](#) 🖱️

A full business plan including market validation, intellectual property and analysis of competitors may be found in [LINK](#) 🖱️



MAJOR SOFTWARE PLATFORMS

ARKAVE

Arkave is a virtual reality platform designed to facilitate location-based entertainment. [LINK](#)

Arkave was selected by Disney for a location based game featuring Mickey Mouse.



YNET

Ynet was developed at YDreams to integrate scheduling, project and asset management and communication. Ynet provided the inputs to the company's SAP platform.

File	Date	Description	All Types	All Users	All Companies
From: Tiago IMPORTANTE					
From: Tiago TIMESHEETS					
From: João NÃO USAR TCM ...					
From: Maria Reserva Sala ...	2004-03-02	Seminário Anual 2	Specifications	Karina Izrael	Lease
From: Miguel Mail Server	2004-03-02	Texto das perguntas respondidas para a reunião	Other	Karina Izrael	Lease
From: Miguel Mail Server	2004-02-19	Instalação para a reunião (cancelada)	Show	Karina Izrael	YDreams
From: Lidiane Dados Pessoa ...	2004-02-19	Nota sobre a reunião (cancelada)	Show	Tiago Costa	YDreams
From: Miguel PE-Dados Pers ...	2004-02-09	100 Speed FX	Relatory	Karina Izrael	EU / C&M

MAJOR TECHNOLOGICAL CONTRIBUTIONS

WEB FILTERING AND SCRAPING

Information system based on space, time a relevance [2008] developed with Portugal Telecom [LINK](#)  [LINK](#) 

LOCATION BASED SERVICES

YDreams' White Paper on Location Based Services [2002] reflecting its major developments for **Vodafone** and other clients. [LINK](#) 

INDOOR LOCATION

Patent sold to **Uber** [2009]

[LINK](#) 

AUGMENTED REALITY

YDreams's Spatial Computing timeline [2021]

[LINK](#) 

DARPA's Brain Machine/AR research project [2005] was a pioneer project where YDreams developed the AR component

Augmented Reality
Brain Machine Interfaces Project

Objective: Develop an Augmented Reality (AR) system to support experiments with disabled humans for Brain Machine Interfaces (BMI) – in partnership with U Florida, linked to broader research project funded by DARPA including as partners Duke, MIT, SUNY, U Florida and Plexon.

Tests with monkeys: demonstrated the ability to use electrophysiological methods to extract information about intentional brain processing, moving an arm), and then translate these neural signals into models that successfully controlled external devices.

Problem: in tests with humans, desired signal in disabled humans (paraplegics, quadriplegics) is not available to sample activator tasks and thus data can not be collected to train the models.

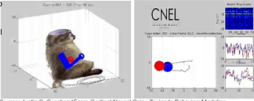
Model outputs are generated using only neural activity.

Source: Justin C. Sanchez, From Cortical Neural Spike Trains to Behavior Modeling and Analysis, CNEL, Department of Biomedical Engineering, UFL.

YDreams AR System: key technological approach to derive the desired response for the disabled subjects in human experiments, efficiently and with flexibility to scale up to train with more complex motor tasks.

info@ydreams.com
www.ydreams.com

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Augmented Reality
Brain Machine Interfaces Project (cont.)

YDreams Augmented Reality System for BMI:

- Integration of brain machine interfaces in augmented reality environments.
- Object detection and tracking algorithms.
- Camera calibration and dynamic 3D model reconstruction techniques.
- Simulation models in augmented reality environments.

- YDreams Simulation System – core system, 3D engine
- Simulation Editing – forward/inverse kinematics, wearables
- Interaction with patient
- Stereoscopy with video-through HMD
- Spatial 3D sound
- 3D modeling
- Encoded spatial coordinates, kinematic parameters
- Occlusion, collision, shadows between real and virtual objects
- Moveable camera calibration and positioning
- 3D camera registration
- Cortical Data Acquisition Unit (CNEL-UFL)
- Signal processing neural network models (CNEL-UFL)
- Wireless data transmission

Superimposing rendered computer graphics of moving virtual hands and arms on real images in real time, resulting immersive environment stimulates the subject's cortical activity associated with "mixed" reality being simulated.

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www.ydreams.com

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MAJOR TECHNOLOGICAL CONTRIBUTIONS

ILLUSTRATIVE AR VIDEOS



Virtual sightseeing system-VSS (2008)

[LINK](#) 



VSS interface, Tarragona (2008)

[LINK](#) 



Play in an AR World (2008)

[LINK](#) 



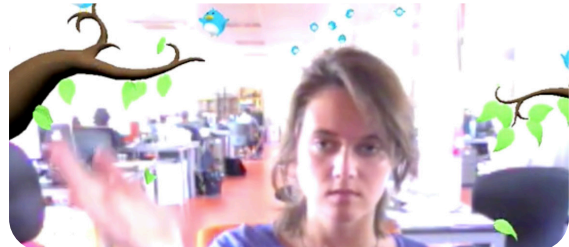
YDreams' Augmented Reality experience with depth-sensing camera (2008)

[LINK](#) 



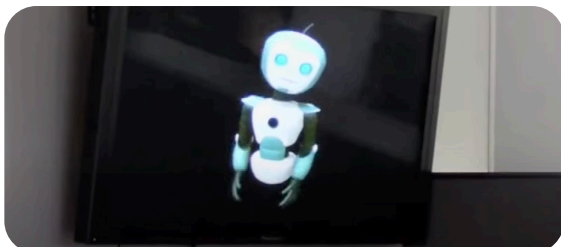
Real-time interaction with augmented reality mascots (2008)

[LINK](#) 



FlyAR (2009)

[LINK](#) 



VicTour, Virtual Interactive Character Tour Guide (2013)

[LINK](#) 

MAJOR TECHNOLOGICAL CONTRIBUTIONS

VIRTUAL REALITY

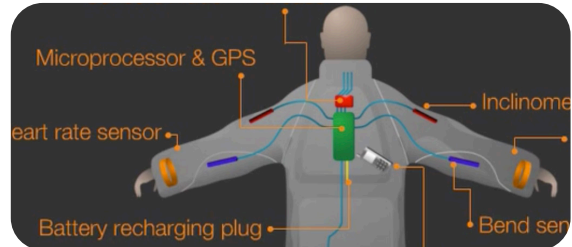


Arkave at GAME XP (2018)

[LINK](#)

[LINK](#)

WEARABLES



Interactive garments for firefighters (2008)

[LINK](#)

[LINK](#)

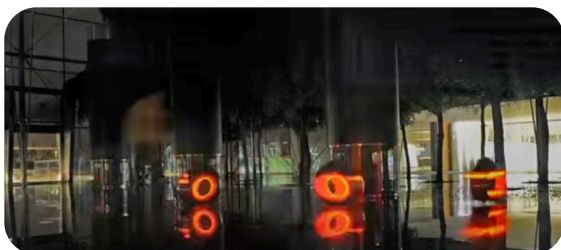
PRINTED ELECTRONICS



Printoo (2014)

[LINK](#)

ROBOTICS



Swarm robotics (2010)

[LINK](#)



Phone robot (2014)

[LINK](#)

MAJOR TECHNOLOGICAL CONTRIBUTIONS

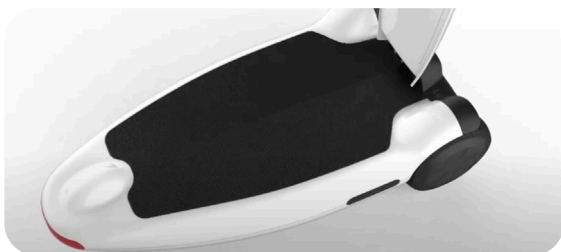
AQUATIC DRONES



Ziphius (2013)

[LINK](#) 

SMART SCOOTERS



3U (2019)

[LINK](#) 

MICRO-VEHICLES



I-Triu (2019)

[LINK](#) 

MAJOR TECHNOLOGICAL CONTRIBUTIONS

Background details are presented in the following documents:

YDreams Technologies 2005 [LINK](#) 

YDreams Miral 2015 [LINK](#) 

YDreams and affiliated companies' patent portfolios (upon request)

REFERENCES

An agnostic company wise list of references coming from **YDreams** and its derivatives.

YDreams has developed 2000+ projects in 30+ countries.
It has also developed over 40 products sold in 50+countries.

The company maintains the essential documentation (including code, videos, and intellectual property) on 300 projects. It also keeps over 3000 proposals and has a list of over 1000+ global clients.

REFERENCES

SPORTS AND ENTERTAINMENT



Adidas World Cup 2006 promotion in major Europe cities, Adidas (2006)

[LINK](#)



Nike, NBA All Star Weekend (2011)

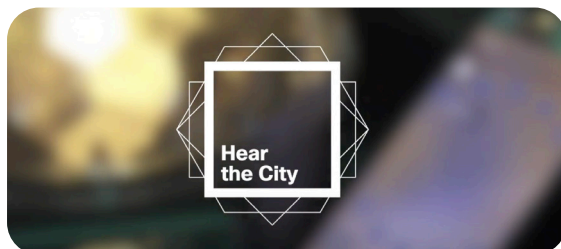
[LINK](#)



Qatar World Cup campaign (2013-2020)

[LINK](#)

[LINK](#)



Rio Olympics city engagement -Hear the City, with Cisco (2016)

[LINK](#)



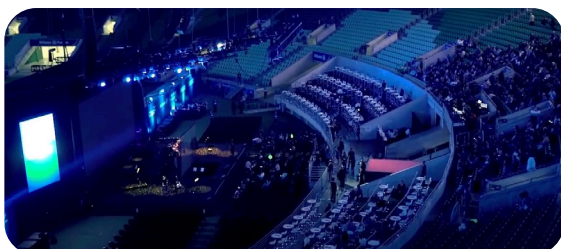
Olympic Museum, Rio (2016)

[LINK](#)



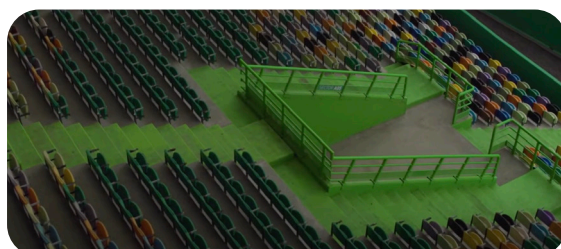
NBA Fan Zones (2017)

[LINK](#)



Holography and VR for 5G launch, with Claro and Ericsson (2020)

[LINK](#)

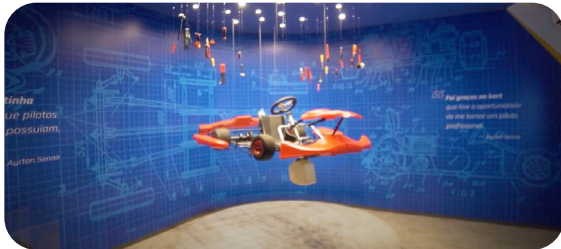


Global Stadium. Filling empty seats with sounds send from home, Sport TV (2020)

[LINK](#)

REFERENCES

SPORTS AND ENTERTAINMENT



Ayrton Senna AI interview (2021)

[LINK](#)



Ayrton Senna Exhibitions,
40 cities in Brazil (2023)

[LINK](#)

SMART CITIES



Randstad Promotion Circle (2005)

[LINK](#)



Barreiro public participation using
virtual reality (2005)

[LINK](#)



Barreiro public participation using
a tangible (2005)

[LINK](#)



Madrid Tourism (2008)

[LINK](#)

REFERENCES

SMART CITIES



Santander Financial City (2010)

[LINK](#)



Rock in Rio Fly Over (2012)

[LINK](#)



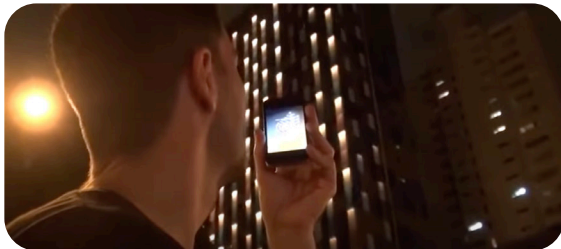
Olympics VR (2012)

[LINK](#)



Macao Tourism (2014)

[LINK](#)



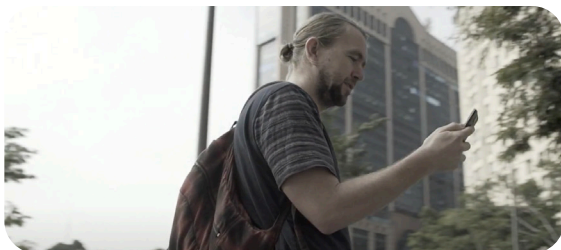
São Paulo, Interactive building façade (2015)

[LINK](#)



Doha Dish Media (2015)

[LINK](#)



Cisco Innovation, Rio Olympics (2016)

[LINK](#)



Cisco, Hear the City, Rio (2016)

[LINK](#)

REFERENCES

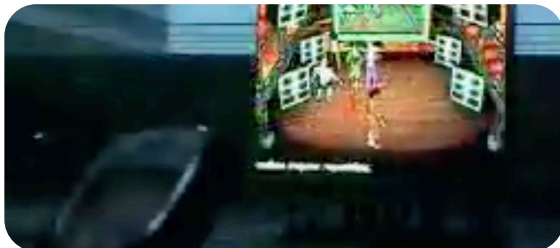
SMART CITIES



Lisboa, Project AL (2021)

[LINK](#)

AUTOMOTIVE



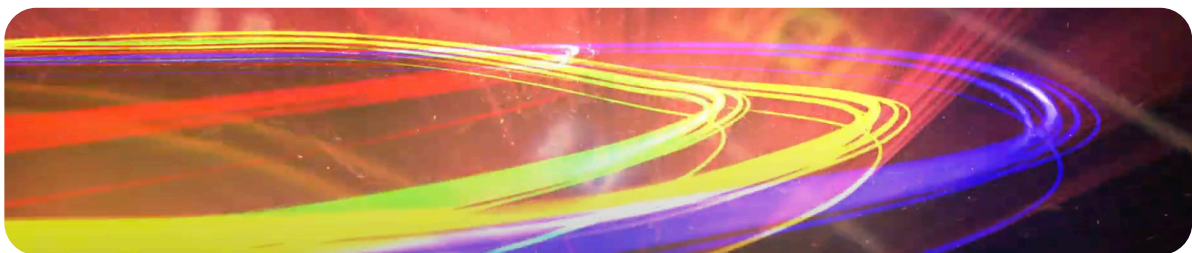
F1 Racing - Vodafone Cube (*Industrial Design Society of America Gold Award*) (2003)

[LINK](#)



Immersive Ayrton Senna using Virtual Reality (2018)

[LINK](#)



NASCAR real time simulations using Augmented Reality (demos) (2019)

[LINK](#)

[LINK](#)

[LINK](#)

REFERENCES

AUTOMOTIVE



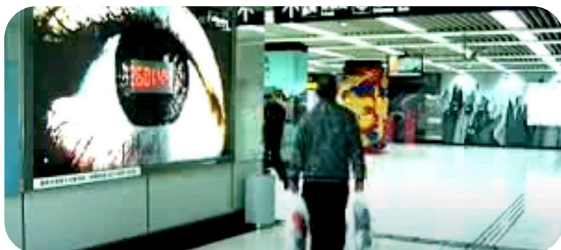
TUGA Innovations interactive 3D models (2023)

[LINK](#)

[LINK](#)

[LINK](#)

AUTOMOTIVE PROMOTIONS



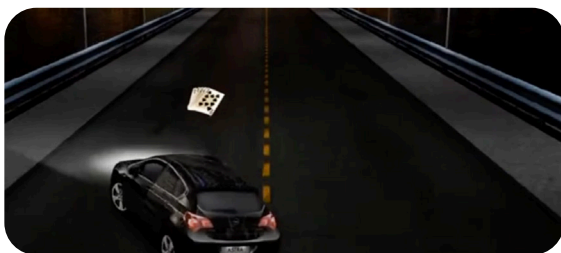
Interactive digital signage for Ford (Shanghai) (2006)

[LINK](#)



Toyota showroom (2008)

[LINK](#)



Interactive audience game for Opel Astra (2009)

[LINK](#)



Nissan interactive floor projection (2009)

[LINK](#)

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AUTOMOTIVE PROMOTIONS



FIAT X-Ray (2010)

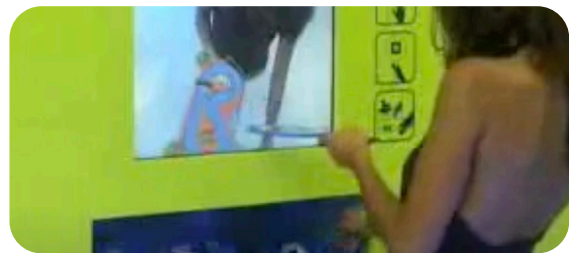
[LINK](#)

RETAIL



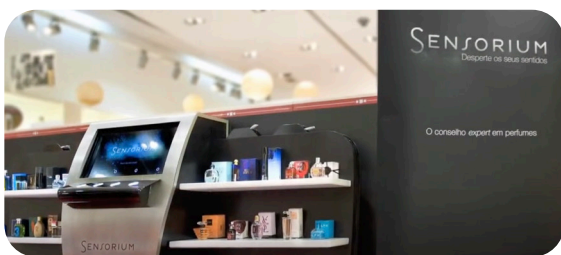
Vodafone (2005)

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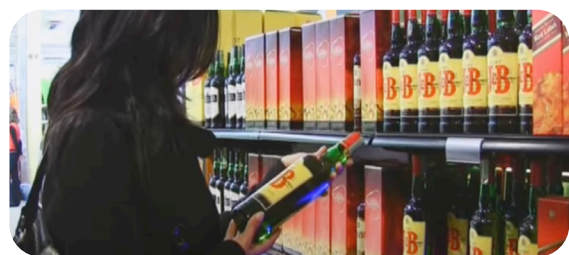
Imaginarium mixed reality (2005)

[LINK](#)



L'Oreal (2010)

[LINK](#)



J&B interactive shelves (2010)

[LINK](#)

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Salsa store (2010)

[LINK](#)



CTT (2013)

[LINK](#)



Bradesco (2013)

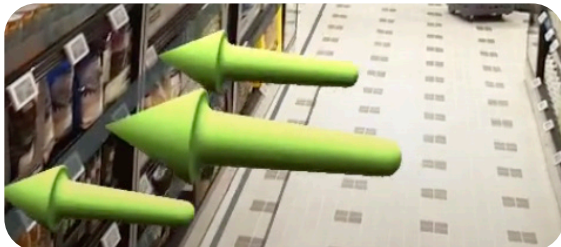
[LINK](#)

[LINK](#)



Natura (2013)

[LINK](#)



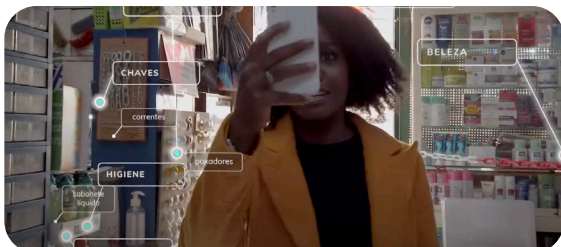
Jerónimo Martins
(under the hood videos) (2019)

[LINK](#)



Sonae Sierra Brazil (2020)

[LINK](#)

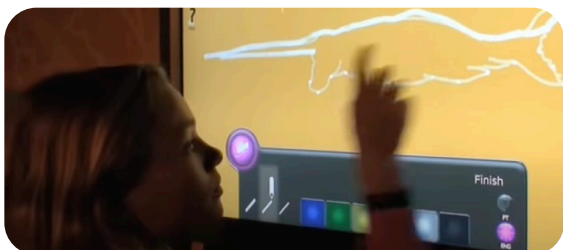


Drogaria Santo Amaro (2022)

[LINK](#)

REFERENCES

CULTURE (EXHIBITIONS)



Sea Monsters, Interactive Exhibition, Oceanarium, Lisbon (2013)

[LINK](#)



Eu, Ayrton Senna (2020)

[LINK](#)



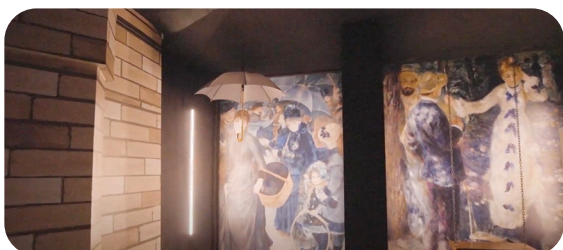
Tarsila do Amaral (2021)

[LINK](#)



Mondrian (2021)

[LINK](#)



Renoir (2022)

[LINK](#)



Van Gogh (2022)

[LINK](#)



Monet (2022)

[LINK](#)



Kadinsky (2022)

[LINK](#)

REFERENCES

CULTURE (EXHIBITIONS)



Niemeyer (2022)

[LINK](#) 



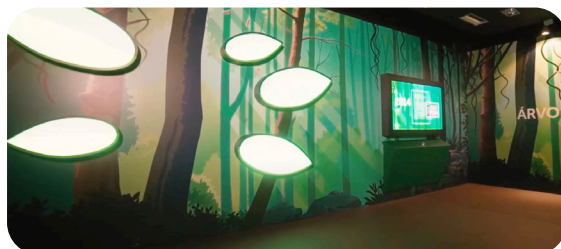
Miró (2022)

[LINK](#) 



Nós e os Cães (2022)

[LINK](#) 



Exposição Especial * 20 anos do
Parque D. Pedro Shopping (2022)

[LINK](#) 

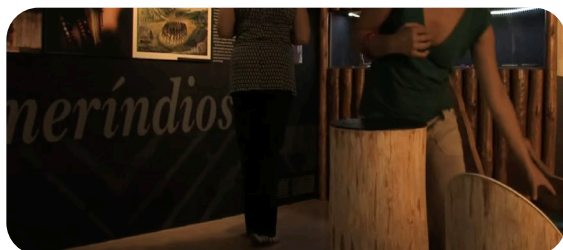


Exposição "Fantástico,
o show da vida" (2023)

[LINK](#) 

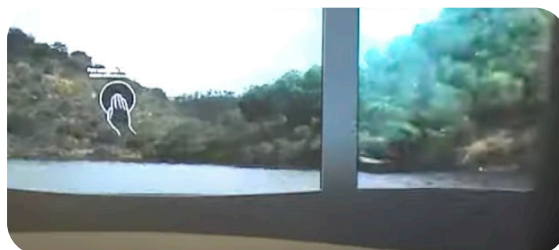
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CULTURE (MUSEUMS)



Belmonte Interpretive Center (2009)

[LINK](#)



Interactive Environmental Interpretation Center in Castelo Branco (2010)

[LINK](#)



BTEK Technology Interpretation Center (2010)

[LINK](#)



Museu Blau, Barcelona (2011)

[LINK](#)



Museum of Quartz (2012)

[LINK](#)



Museum of Cervejaria Bohemia (2014)

[LINK](#)



Museu Bradesco (2014)

[LINK](#)



Museu Olímpico e Para-Olímpico (2017)

[LINK](#)

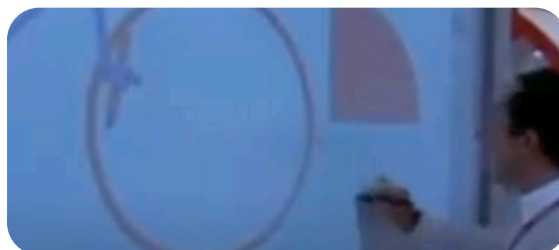
REFERENCES

EDUCATION



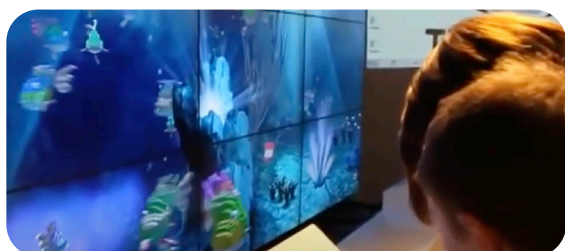
EGF Environmental Awareness Roadshow [2009]

[LINK](#) 



Grupo Positivo Informática [2011]

[LINK](#) 



Lego Aquarium, in partnership with Intel [2013]

[LINK](#) 



Family Energy Blue Park [2013]

[LINK](#) 



Naves do Conhecimento [2013]

[LINK](#) 



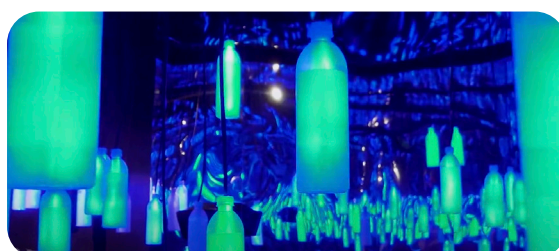
AquaRio interactive aquarium [2017]

[LINK](#) 



Barretos Cancer Hospital [2018]

[LINK](#) 

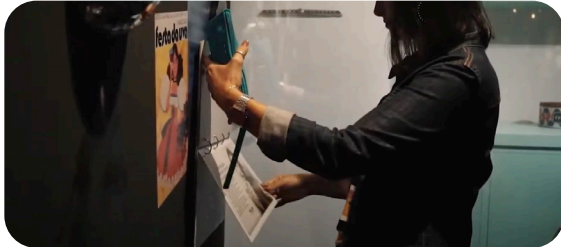


Water and Us [2019]

[LINK](#) 

REFERENCES

EDUCATION



Light Memory Room (2020)

[LINK](#) 



Seixal Criativo (2023)

[LINK](#) 

HEALTH



YScope: Natural User in
Operating Rooms (2012)

[LINK](#) 

REFERENCES

BRAND EXPERIENCES



Nokia Interactive Billboard (2008)

[LINK](#)



Nestle Dolce Gusto (2010)

[LINK](#)



W Hotels (with Apple) (2010)
password: dafundo

[LINK](#)



Casa Coca-Cola (2010-2014)

[LINK](#)



FIFA Fan Fest - Coca-Cola (2010-2014)

[LINK](#)



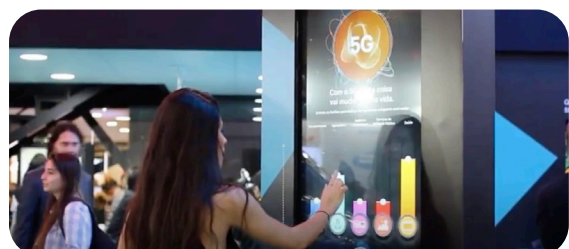
Happiness Factory
Coca-Cola (2010-2014)

[LINK](#)



Morumbi Experience
Coca-Cola (2010-2014)

[LINK](#)



Qualcomm (2016)

[LINK](#)

REFERENCES

BRAND EXPERIENCES



Embraer (2020)

[LINK](#)



Shell Eco-Drone (2020)

[LINK](#)



Peppa Pig in the world (2022)

[LINK](#)



Play Doh (2023)

[LINK](#)



Dungeons and Dragons (2023)

[LINK](#)



Barbie House (2023)

[LINK](#)

REFERENCES

GAMING



Vodafone Cube (2003)

[LINK](#) 



Undercover Series (2004)

[LINK](#) 



Cristiano Ronaldo
Underworld Football (mobile) (2006)

[LINK](#) 



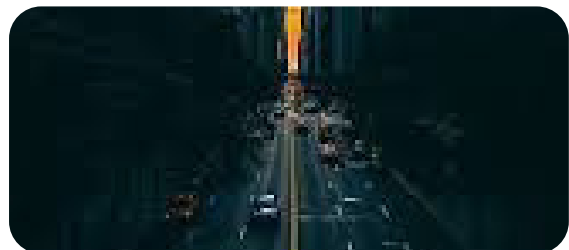
Spooks,
BBC (location based mobile) (2006)

[LINK](#) 



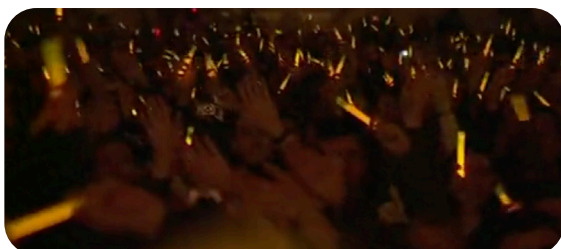
Lex Ferrum
(location-based-Bluetooth) (2006)

[LINK](#) 



Wall Street Fighter
(Mobile- GPS based) (2007)

[LINK](#) 



City of Lights, Lyon
(outdoor crowds playing game) (2009)

[LINK](#) 



Disney Cruises
(Theater-based crowd game) (2010)

[LINK](#) 

REFERENCES

GAMING



Arkave - The last squad (2019)

[LINK](#) 

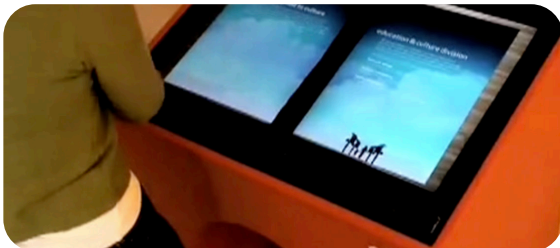


Mickey Mouse: The Golden Heart (2019-2023)

[LINK](#) 

[LINK](#) 

ARCHITECTURE, ENGINEERING, AND CONSTRUCTION

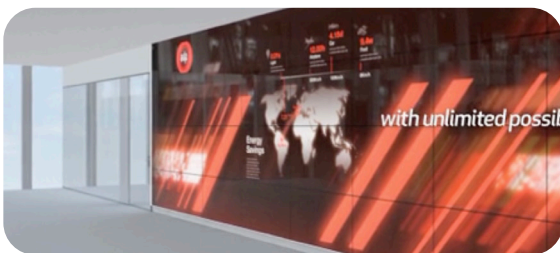


YDreams furniture (2007)

[LINK](#) 



EDP Picote, visual management system (2012)



EDP building (2013)

[LINK](#) 



Puaça (2013)

[LINK](#) 

SKUNKWORKS

Explorations by YDreamers and friends:

A TV in the Sky (2000) [LINK](#) 

Interactive T-shirts (2007) [LINK](#) 

The YBand: six sets of musicians used the company's studio to practice. One of the configurations was second in Fortune Magazine's Battle of Corporate Bands in 2008 [LINK](#) 

.txt interactive digital performance (Fernando Nabais) (2011) [LINK](#) 

AR cookie (2011) [LINK](#) 

Enchanted mug (2013) [LINK](#) 

Interactive card (2015) [LINK](#) 

Synthetizart (A virtual piano, Escola das Artes, UCP) (2016) [LINK](#) 

REELS

YDreams 2010

LINK 

YDreams 2011

LINK 

YDreams 2012

LINK 

YDreams 2014

LINK 

YDreams 2015

LINK 

YDreams 2016

LINK 

YDreams 2018

LINK 

YDreams 2020

LINK 

YDreams 2022

LINK 

DREAMS

Tejo Estuary (2009) [LINK](#) 

Guimarães, a future Vision (2009) [LINK](#) 

Interactive Gardens (2010)

Indoor gardens using digital trees (*password: dafundo*) [LINK](#) 

Artificial fish (*password: dafundo*) [LINK](#) 

Interactive statues (*password: dafundo*) [LINK](#) 

Solar plants [LINK](#) 

Interactive gardens (general document) [LINK](#) 

Museum of the Portuguese Language (2011) [LINK](#)  [LINK](#) 

Science and the Discoveries (2014) [LINK](#) 

SELECTED MEDIA

Mobile games at Guardian (2005) [LINK](#) 

Reality, only better at Economist (2007) [LINK](#) 

YDreams at France 24 (2008) [LINK](#) 

Canesta, YDreams partner to take augmented reality mainstream at Venture Beat (2010) [LINK](#) 

Audience Entertainment at Tech Crunch (2010) [LINK](#) 

YDreams Retail at Globo News (2012) [LINK](#) 

Could printed electronics be getting a cigarette break?
Ynvisible on Financial Times (2012) [LINK](#) 

Beautiful Banks of the Future at CNN (2014) [LINK](#) 

YDreams at Wired (2009-2016) [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#) 

[LINK](#)  [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#)  [LINK](#) 

Azorean at Engadget (2013) [LINK](#) 

Ynvisible at Quartz (2014) [LINK](#) 

SELECTED MEDIA

YDreams at Fast Company (2012-2019)

[LINK](#) 

[LINK](#) 

YDX, Ynvisible and TUGA Innovations are covered

daily in international media as listed companies in Toronto,

Frankfurt and OTC (2017-2023)

[LINK](#) 

[LINK](#) 

[LINK](#) 

SELECTED AWARDS

IDSA 2004 [LINK](#) 

IST Prize, Top 15 EU Projects in the last 15 years, 2010 [LINK](#)  [LINK](#) 

Auggies 2010 [LINK](#)  [LINK](#) 

El Ojo Gold 2012 [LINK](#) 

Engadget Insert-a-Coin 2013 [LINK](#) 

Top 10 kits for hardware prototyping 2014 [LINK](#) 

Visionary of the Year Award 2016 [LINK](#) 

IF Design Award 2017 [LINK](#) 

Hyper Award 2018 [LINK](#) 

Top Mobility Startups to watch 2023 [LINK](#) 



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COLLECTION (TYC)***