13th CDTI - NEDO Joint Workshop

"AI-Equipped Collaborative Robot Technology"

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Artificial Intelligence and robotics for rehabilitation, care and education

Fernando Fernández

CSO Inrobics Social Robotics

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robots for a better quality of life

Professor Universidad Carlos III de MADRID

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Alma & Inrobics

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About Inrobics: founders, vision and mission

The Founders

10 years building innovative social technologies to impact on people's quality of life, together with a highly qualified team

Spin off uc3m Universidad Carlos III de Madrid

José Carlos Pulido
CEO and Founder
Ph.D. in Computer Science

MBA in Digital Health.
Postdoc at University of Southern California. Human robot interaction, AI and e-Health.

José Carlos González
CTO and Founder
Ph.D. in Computer Science

Postdoctoral stay at Carnegie Mellon University
Robotic architectures and back end processes expert

Fernando Fernández
CSO and Founder
Ph.D. in Computer Science

Faculty of the Computer Science Dept. at UC3M
20+ years leading AI and robotics R&D projects

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About Inrobics: some data

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Management

José Carlos Pulido
CEO/ Founder

José Carlos González
CTO / Founder

Research and Development

Fernando Fernández
CSO / Founder

Rodrigo Alarcón
Data Scientist & NLP

Carmen Díaz
HRI Engineer

Clinical and Regulatory

Fuensanta García
Clinical Advisor Quality & Reg.

Irene Domínguez
OT & Clinical Advisor

Software development

María Almeida
Robotic Engineer

Víctor Cereijo
Data Engineer

Raúl Agreda
RV Designer

Marketing & Sales

Tania Tejada
Business Strategy & Internationalization

Ana Moreno
Operations

Ana Albendea
Marketing & Communications

Daniela Paucar
Internationalization

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Products, services, technologies of the company

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Our Social AI

aws

ALMA

The most advanced AI system for care and rehab

AI Technology

NLP Modules Generative AI	Machine Learning Predictions	Adaptive Decision Making
Conversational	**User adaptation**	**Autonomy**

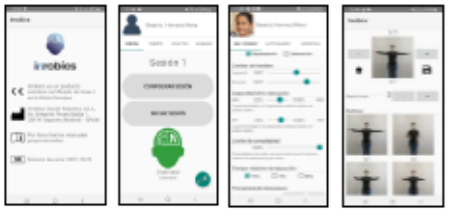
A modular multimodal interaction system, agnostic to third-party technologies

ACCESSORIES

Embodied agents	Virtual agents	Measuring devices
NAO, Pepper, QT, Temi	Avatars, AR/XR	Body Tracking, HR Sensor, Fall detection

INROBICS APP

Configuration, control & outcomes



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Products, services, technologies of the company

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CE Class I, Reg No. RPS/777/2021

Product Portfolio

Inrobics Rehab Clinic ®

A **social robot** for **physical** and **cognitive stimulation**

Inrobics Analytics ®

An **Advanced Analytics** and **Reporting** System

Inrobics Rehab Virtual ®

A **virtual** robot **companion** for **home rehabilitation**

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Main challenges and solutions in the project/case presented

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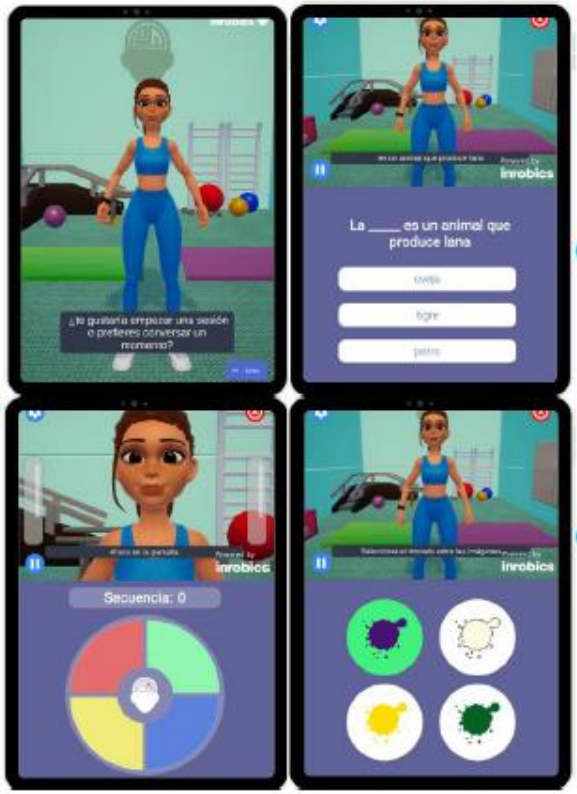
Inrobics Care ®

Clara Inrobics' 24/7 virtual assistant for home use. From a **mobile or tablet**, it lets users hold **conversations**, **connect** with family, set **reminders**, and perform personalized **physical** and **cognitive exercises**— autonomously



Using social AI, *Clara* adapts to each user's needs and progress—ideal **for healthy seniors** or those with mild to **advanced** cognitive **challenges**

Scalable and **modular**, Inrobics fits into existing care services, promoting **autonomy**, **reducing loneliness**, and **supporting families** with peace of mind

Welcome! *Clara*

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Ideas for a Japan – Inrobics collaboration

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- ✓ **Medical Vision System Optimization:** Collaborate to integrate other accessories, like lenses and cameras into Inrobics' Computer Vision (CV) sensors.
- ✓ **Advanced Behavioral AI for Safety and Assessment:** Integrate **Behavior Recognition AI** into Inrobics' Alma engine.
- ✓ **Hardware Platform Expansion:** Collaborate to integrate the Alma software (Inrobics' AI) onto diverse robotic platforms.
- ✓ **Strategic Asian Distribution Alliance:** Establish an agreement where Japanese companies serve as a **strategic distributor or sales partner** for the certified Inrobics Rehab and Care platforms in Japan and the broader Asian market.

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Ideas for a Japan – Inrobics collaboration

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- ✓ **Joint R&D for Clinical Support Tools (B2B):** Create a joint R&D project to design semi-autonomous robotic assistants that, using optical components and hardware expertise, support clinical staff in non-therapeutic tasks (e.g., material handling, simplified patient monitoring) within hospitals, further reducing the professional workload.
- ✓ **Educational Robotics for ASD/Special Needs**: Integrate the **Alma AI's relational/social skills training modules** (used in early care/ASD) into other educational robots.
- ✓ **Recognizing, analyzing, and predicting human behavior with multi-camera tracking capability:** AI Model Enhancement (with **high-accuracy human pose and trajectory estimation,** or complex, clinical-grade gait analysis) and **Spatial Awareness & Safety** (trigger safety alerts and record objective data across an entire therapeutic space, not just one camera point.)

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Fernando Fernández
CSO Inrobics Social Robotics
ffernandez@inrobics.com

Thank you

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