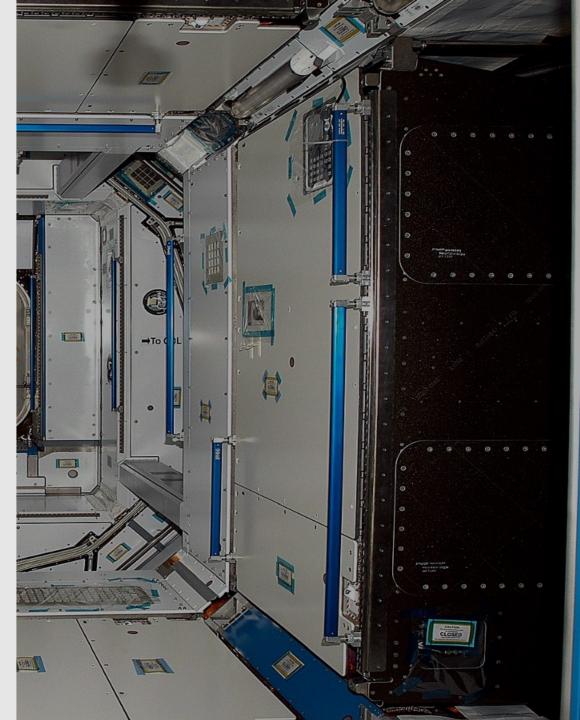
# Mauro Franco Barrales Pizzolante

Gustavo Joaquín Gonzales Scarone

Mikaela Dominguez





### Zero-G Entertainment

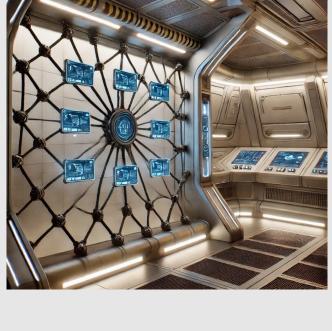
Merging fun and fitness with cognitive training devices for astronauts. Portable LED screens with motion sensors power reflex games, while a vest adds resistance and tracks health—keeping astronauts sharp, fit, and mission-ready.

#### Game Modes

There are **two main game modes**: "free" and "stationary."

The **stationary** mode includes sub-modes such as memory, learning, and musical challenges, combining physical strength (enhanced by the vest) and reflexes. In this mode, the LEDs are fixed in designated positions.

The **free** mode focuses on memory tasks, a race, and an All In One option, which can be played solo or with others. The screens can be set up in one location or spread out, allowing for flexible and dynamic gameplay.



Stationary







#### LED Screens and Vest

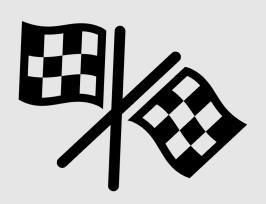
The LED screens are **compact and portable**, each **with motion sensors** that detect player interactions.

As an essential component of the game, the vest is designed to enhance **physical engagement**. It includes elastic resistance bands connected to the wrists, adding a layer of physical challenge by requiring more effort in hand movements.

Additionally, the vest is equipped with a health monitor that tracks vital signs in real-time, ensuring the astronaut's physical condition is monitored during gameplay.

# Let's Play!

Let's take **Race Mode** as an example: This mode can be played solo or competitively. In solo play, the player must press the devices as fast as possible as they light up. In competitive mode, astronauts race to see who can "press" them first.





## References

<a href="https://en.wikipedia.org/wiki/Harmony\_(ISS\_module">https://en.wikipedia.org/wiki/Harmony\_(ISS\_module)</a>

Chat GPT for images.

