# The Robotic Platform for Museums Excursions

1.Objective of the Work:

The goal of this project is to design and implement a robotic platform dedicated to guiding museum excursions, providing visitors with an interactive and specific way to explore exhibits. The primary aim is to enhance the overall museum experience and offer a new approach to education through the innovative use of robotics.
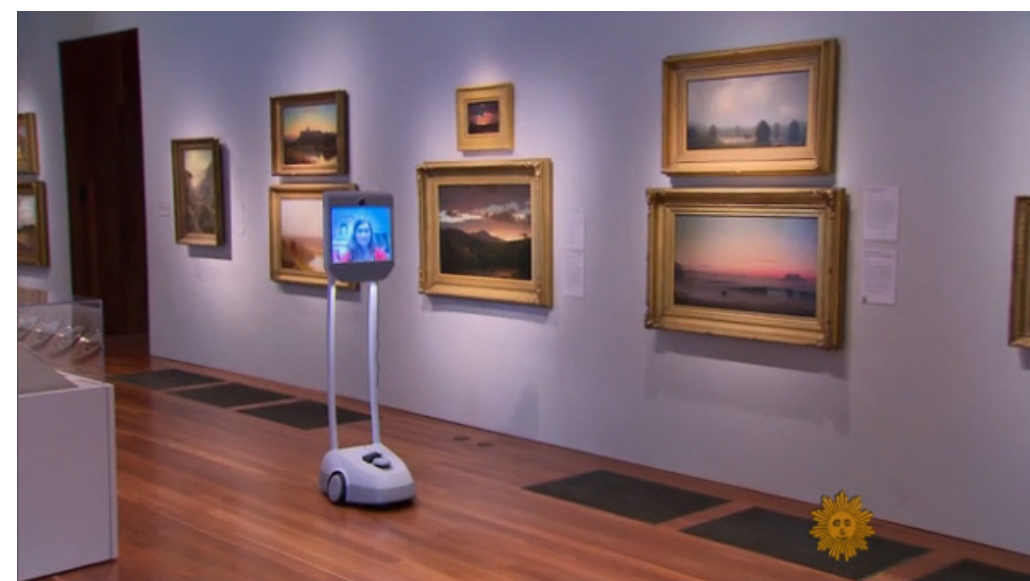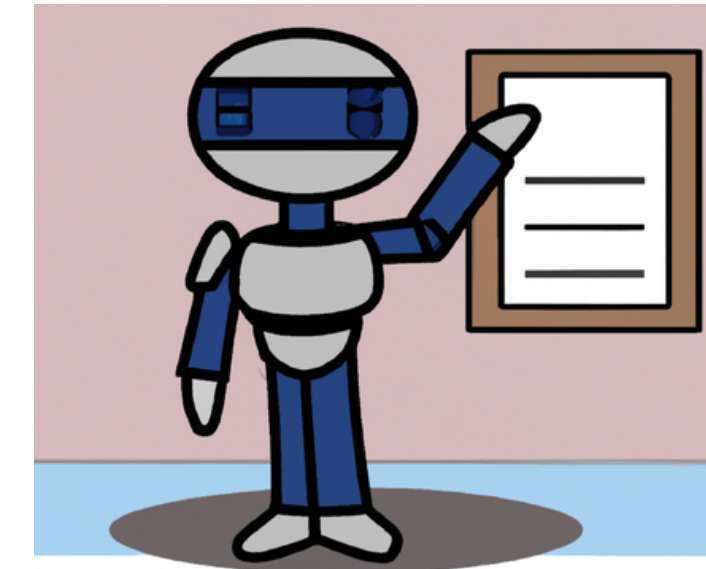
2.Why is it useful in today's context?

In the current era, where cultural institutions compete for public attention, creating a robotic guide for museums introduces innovations in education and responds to visitors' demand for interactive experiences. With advancements in robotics and artificial intelligence, the project focuses on current possibilities, contributing to the creation of memorable museum experiences.

3.Key Technologies:

- Raspberry Pi: Leveraged for its versatility, compact form factor, and GPIO pins, ensuring seamless integration.
- Nvidia Jetson Nano: Utilized for its GPU capabilities, facilitating efficient processing of complex algorithms crucial for navigation and interaction.
- ROS (Robot Operating System): The entire project was developed within ROS, offering a modular and scalable architecture for hardware communication and system control.

Project 3 : Computer Engineering   Student : Bc. Vladyslav Shkapych   Pedagog: Ing. Peter Šarafín PhD.