Abstract

The term “telepresence” was coined by Dr. Marvin Minsky in the 1980’s, describing the idea of virtually being somewhere else than your actual location and still sense it as a real experience. In other words, to be at two (or more) places at same time. Robotics made that possible, but with some restrictions. The scientists and engineers are still working to make the virtual experience each time closer to the real one, by finding ways to move the robots through connections to the person body, and even bring to the person fabricated sensations of texture and smell. Anyhow, it is possible for people to purchase affordable robots that offer the virtual presence by image and sound of where they want to be, allowing them to move around too. Surgeons, business people, ill people and tourists are making big use of that. The reasons are many: it decreases the danger of some jobs, save the cost and time of a real travel, can make contagious or weak people to go back to their social environment, make people closer. Despite all the wonders of this technology, the researchers are also concerned about how people would answer to their actions when being at one jurisdiction, but virtually acting at another.This project will implement a telepresence robot controlled by social media. The robot will move around the building exploring the space and live streaming the image of the space that it is located. The image will be available online for people to explore the building together with the robot. The image will be available at an online platform, where people will be able to interact with the robot, changing the direction he is going to move. This is an interesting and non-conventional way of exploring an architecture and an opportunity to observe how people will interact with the robot. The physical structure of the robot will count with chassis, a locomotion system consisted by two servomotors and three wheels, an IP camera, and a LED matrix display, all commanded by a Raspberry PI computer.

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