Abstract

Wandercraft's goal is to provide a robotic platform that allows walk impaired people to walk again with our exoskeleton and to learn how to walk again by themselves.

One of the most challenging aspects of building such a robot is the variety of people that can ride it. Patients differ in size, weight, strength, power they can provide during walk, behavior and can present a variety of pathologies.

Thus, our main focus was to accommodate the uncertainty that represents the pilot of the exoskeleton, who can be considered as an uncontrolled disturbance with a mass equivalent to that of the robot. In this talk we will present the approach that led us to building such a robot, selling it to hospitals as a medical device. We will also discuss our most recent progresses as well as some of our future plans to build a personal walk exoskeleton.