DigiEduHack Solution
Turin - Improving the learning experience through Robotics
Challenge: Turin - Improving the learning experience through Robotics Challenge 2020

Remote control multitask tool based on e.DO

Introducing tool

Taking advantage of the modular open source robot e.DO we propose to use it as an unique remote multitask tool with just changing the last module according to each job request.

Team: Arm for the future

Team members

Agustin Gimenez - Congzhou Ye

Members roles and background

Our team is formed by two guys that combined their ideas and made the project as one. Agustin Gimenez, from Argentina, student of engineer and Congzhou Ye, from China, that is in his last year of superior college.

Contact details

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Solution Details

Solution description

The team noticed that there are plenty of jobs that could be done by a robot remotely controlled, which means that lot of people could be still having their jobs but without risking their bodies or inclusive, their lifes.

The proposal is to use e.DO robot like a multitask tool by using the last module as an interchangeable one so it could be adapted for different needings.

In the last module, robot will be equipated with a cam that transmit the images to the operator through virtual reality glasses as well as he will have movement sensors in his arm in order to control the mechanical arm.

Solution context

Our solution could reach every kind of industry in the world. The mechanical arm guided by an operator could help in every kind of job. It could be used to paint, to weld, to repair other machines, to dispense, to polish surfaces, to handle elements and to extract material, so basically it could be used in all kind of productions.

Solution target group

This improvement is inclined to industries that believes in automation like a tool to reduce employees risk, reduce costs, improve production velocity and also who follow an environmental plan.

Solution impact

With these improvement industries will notice a reduction injuries and accidents of their employees.

Also, it would impact directly in their economy because the unification of activities will reduce cost of materials, reparations will be concentrated and operators only need capacitation in one only machine.

Our solution brings improvements to industries as well as to their employees and environment.

Solution tweet text

Old problems Need a new solution. Multitask tool that helps industries, employees and environment all in one. #AllInOne

Solution innovativeness

It brings a new sheme of automation for industries.

Solution transferability

With the proper adaptarion it could be applied in all kind of industries without restrictions.

Solution sustainability

The unification of labors in one only machine would reduce the quantity of materials wasted, so will improve industries financials opening a door to new investments.

Solution team work

Although we are from diferent countries and speak diferent languages we had a very good hackaton. Communication was not an issue, we put our ideas together and enjoy the trip. There are no doubts we are working together in the future.