



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

Right Arm

One machine to have them all

Do you need a hand?

Team: Trovami

Team members

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Solution Details

Solution description

The versatile Right Arm allows various different manipulations through a single tool. The robotic arm can change the tool on its tip and read instructions from your favourite 3D CAD program to sculpt or build in any material your heart desires.

Solution context

Hobbies such as woodworking, welding and 3d sculpting are inaccessible since the tools needed are specialized, costly and cumbersome; we aim to change this.

Solution target group

The target of the project are hobbyists, manual workers and artisans.

Solution impact

It is no longer necessary to buy several tools to complete a job thanks to this flexible all in one tool which can incorporate different processes.

Solution tweet text

Have you ever wanted a table saw, a drill press, a laser cutter, a welding machine, a 3d printer... But lack the space or money for them? Check this out!

Solution innovativeness

Right Arm is unique because it changes your way of thinking about your work. It's the machine which adapts to you and your needs. Instead of you having to move your piece between several machines you can focus on your creativity.

The machine can be programmed to fit every situation, and incorporate functions of an array of different power tools. It is designed to be completely independent, even being able to swap autonomously between different utensils.

Solution transferability

The robot is perfect for hobbyists but can also be useful to small companies and small manufacturers.

It doesn't have to be used for heavy duty, for example a jeweler could use it as a high precision machine.

Solution sustainability

The first step would be to make a more accessible and practical interface for the robot, to allow people with different skill sets to use it.

Secondly an open universal mounting mechanism should be created, so different companies could provide all types of tools.

Solution team work

We have known each others for so long, and we are used to working as a team.

We had a pleasant experience cooperating and we are looking forward to doing it again.

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