

## **Creation of an Online Interface for RoboPicasso using Sphero Mini Robots**

**Background and problem:** The ball-shaped Sphero robot is about the size of a ping-pong ball, but it's full of technology. Two motors, a rechargeable battery, colored LEDs and a remote control module enable the Sphero to be controlled via smartphone and facial expression recognition -- smiling means driving forwards, looking sad means driving backwards and steering is done by tilting the head. Manual control by hand, following a pre-drawn line or programming via a graphical interface are also possible. The idea behind RoboPicasso is to pack the Sphero robots into a waterproof and paintproof shell and use them as a mobile paint roller or brush. The robot first drives through paint, picks it up on the surface, and then releases it back onto a canvas as it moves across it. This creates abstract, colorful and interesting drawings and patterns depending on the color selection and control. With this activity, which combines creative design and technology sensitization in an innovative way, we would like to explore the question of how creatively people and robots can paint together. Anyone from 3 to 99 years of age can control the robots via smartphone during the interactive hands-on activities. More information can be found at the following websites:

- ▶ <https://bit.ly/RoboPicasso>
- ▶ <https://www.facebook.com/robo.picasso>
- ▶ <https://twitter.com/hashtag/RoboPicasso>
- ▶ <https://www.instagram.com/p/CBYVp49gEte/>
- ▶ <https://www.instagram.com/p/CBbSbjFAO8q/>

**Task:** Such live activities are nice, but somehow difficult in Corona times. The idea for the project is to develop a framework that allows to control the Sphero mini robots remotely and to watch the scenery live using a webcam. The main task is to program a web page that allows the remote control of the Sphero bots. Some ideas on how to do that are given here:  
<https://www.inovex.de/blog/sphero-sprk-gobot/>

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◀ Vorherige Meldung

Nächste Meldung ▶