### Hashtags: #robotic, #exomarsrover

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### Tags: Hardware

**Challenge Description**

People have created models of the NASA Curiosity rover—this project would try to test actual functionality using robotic hardware/software. Build a functional robotic model of the ExoMars rover for educational purposes. Program collision-avoidance strategies. Plans should be open hardware and made available to the public.

**Background**

A model of the NASA Curiosity rover has been built and can be purchased online. This project would go further and try to test actual functionality using robotic hardware/software.

**Solution Ideas**

Here are some ways for you to frame this solution:

Working scaled model of the ExoMars rover (or any rover); and/or

obstacle avoidance on uneven terrain using sensory input

**Sample Resources**

* <http://exploration.esa.int/mars/>
* <http://exploration.esa.int/mars/45084-exomars-rover/>