

BEGIN ROBOTICS INDEX

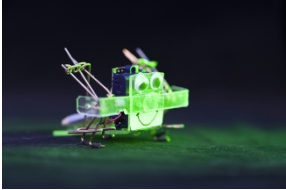
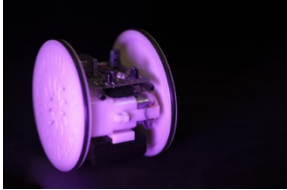
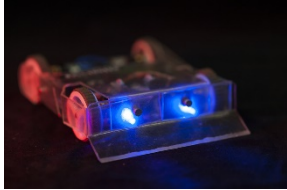
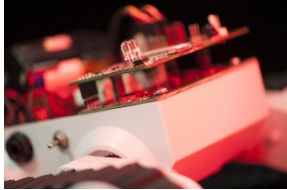
SIMULATIONS

Associated with the Begin Robotics open online course developed by the University are a series of interactive web pages written by Richard Mitchell.

Some of these are used as exercises in this four-week course. Others are used to help describe or demonstrate an aspect of robotics. Feel free to investigate them, but do note that full details are available on the Begin Robotics course.

REQUIREMENTS

These simulations require that you have a web browser which supports the canvas (such as Firefox, Chrome and modern versions of Internet Explorer), and that javascript is enabled.

WEEK 1	WEEK 2	WEEK 3	WEEK 4
			
<u>Define Speeds so robot moves</u> ➡	<u>Define Speeds so robot avoids walls/ follows a line</u> ➡	<u>Command a robot</u> ➡	<u>Define speeds to follow walls/ maze</u> ➡
<u>Define Speeds for different actions</u> ➡	<u>Define Motor Speeds to react to lights</u> ➡	<u>Define speeds to track a moving object</u> ➡	<u>Define Neurons for the Braitenberg Vehicle</u> ➡
<u>Voltages and Wheel Directions</u> ➡	<u>How Ultrasonic sensors work</u> ➡	<u>Showing Speed Control</u> ➡	<u>See a robot learn to avoid obstacles</u> ➡
	<u>Accelerometers on a phone</u> ➡	<u>Controlling Rocking Motion of Robot</u> ➡	<u>Multiple Robots Interacting</u> ➡
	<u>Pulse Width Modulation</u> ➡	<u>Explaining Velocity Feedback</u> ➡	<u>Demonstrating Fractals</u> ➡
	<u>Robot and PWM</u> ➡	<u>Demonstration of Daisyworld</u> ➡	