

Hummingbird Robotics

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Name Game

- Name
- Grade
- Something you love to do
- What you want to be when you grow up

What are we Doing?

- Explore human-robot interaction
- Learn how to build robots using Humminbird Robotics
- Learn how to program robots using Snap
- Learn about the elements of design
- Explore careers for girls in STEM fields

Exploring Human-Robot Interaction



Human-Robot Interaction

- Wall-E



Other Examples?

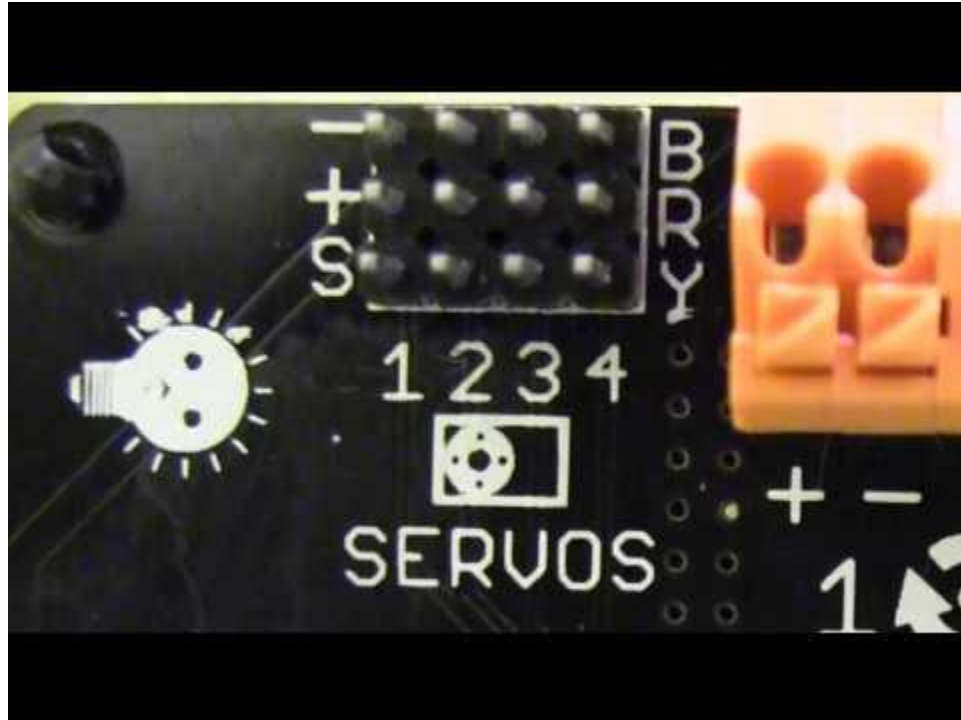
- Siri
- R2-D2
- Pandora

Materials

Take:

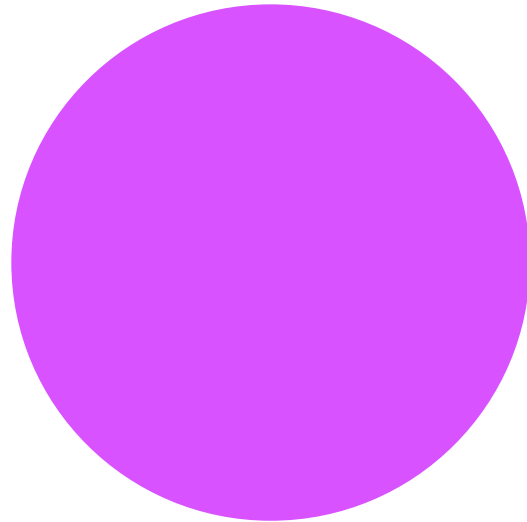
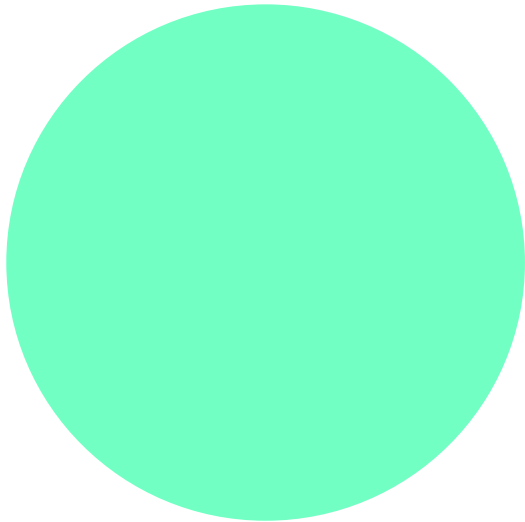
- One Hummingbird Duo Board
- Three LEDs
- Two Tri-Color LEDs
- One USB Cable
- Terminal Tool
- User Guide

Exploring LEDs

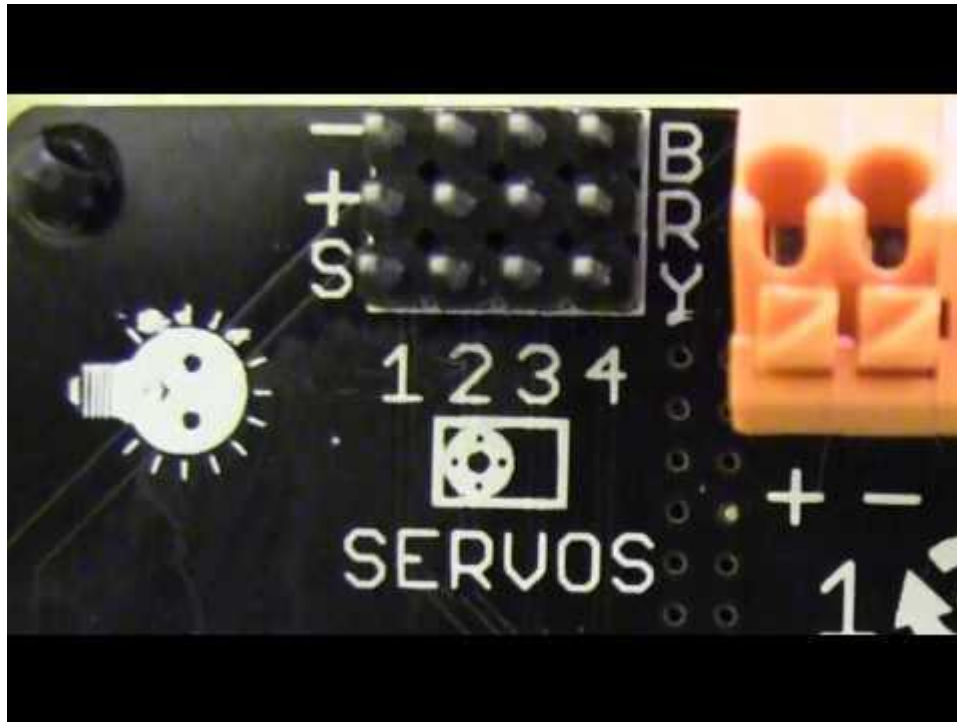


LED Challenge

- Light up 3 Single LEDs
- Get your 2 Tri-Color LEDs to match the colors on the screen



Sensors



If-Then, Else Statements+Challenge

- If I _____, then _____.
- If I _____, then _____. Otherwise, _____
- If the robot's temperature is cold, turn on a blue light. Otherwise, turn on a green light.
- If the robot is cold, turn on a blue light. If the robot is hot, turn on a red light. If the robot is a good temperature, turn on a green light.

What Can I Do With Hummingbird?



Clean Up + Discussion

- Why might people in the real world want to use sensors and indicators?
- Who might these people be?