CIRCUITS AND CODING

The purpose of this lecture is to introduce the components of a closed-loop circuit and the basics of computer programming.

It is recommended to have multiple computers to compile the code and the circuits pre-built (soldered) for this workshop. Provide tape and velcro for the girls to attach the circuits to their shoes.

For purchasing items and building the circuit, refer to the Adafruit tutorial LED Firewalker. https://learn.adafruit.com/firewalker-led-sneakers/overview

Remember to orient the LED strip in the correct direction (see small arrows) and prevent the conductive thread from touching itself so the circuit won't short.

After going through the lecture, explain the components of the LED Firewalker circuit in more detail. (Ex. That Velostat changes electrical resistance when squeezed. That the "Pins" on the Flora Circuit board are inputs and outputs).

During and after the PBJ demo, have the girls volunteer examples of if statements and loops. (Ex. Continue spreading peanut butter (the loop) until the bread slice is completely covered (the condition)).

ÜÒÙŀĠËŒÍ Girls Who Build: Make Your Own Wearables Workshop
Spring 2015