

Etude Two: Perceptron-P

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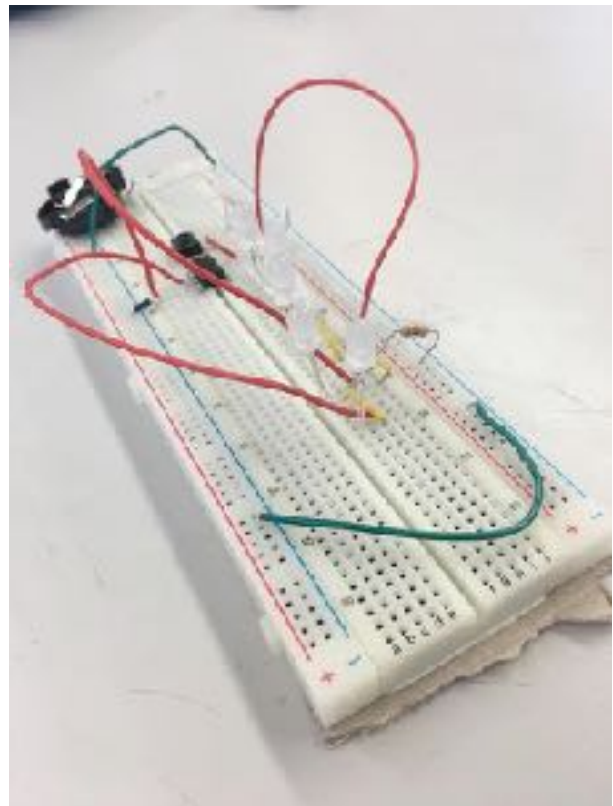
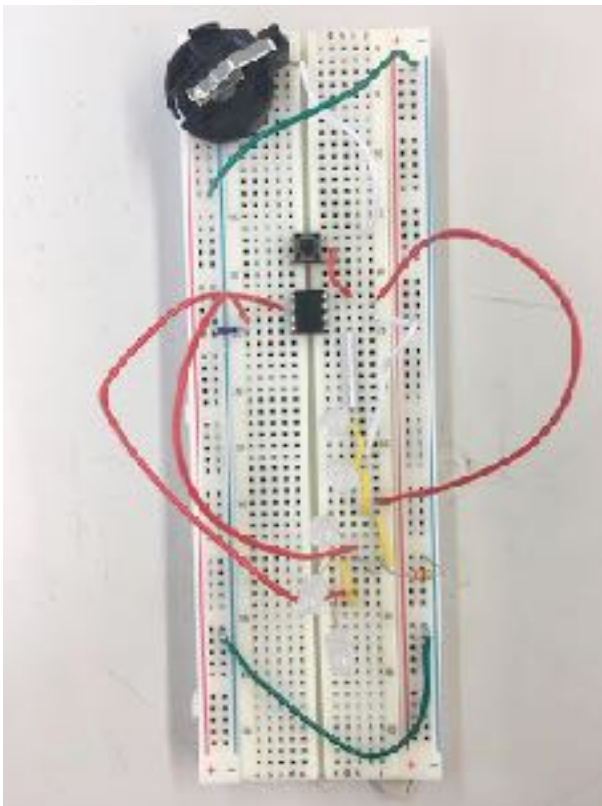
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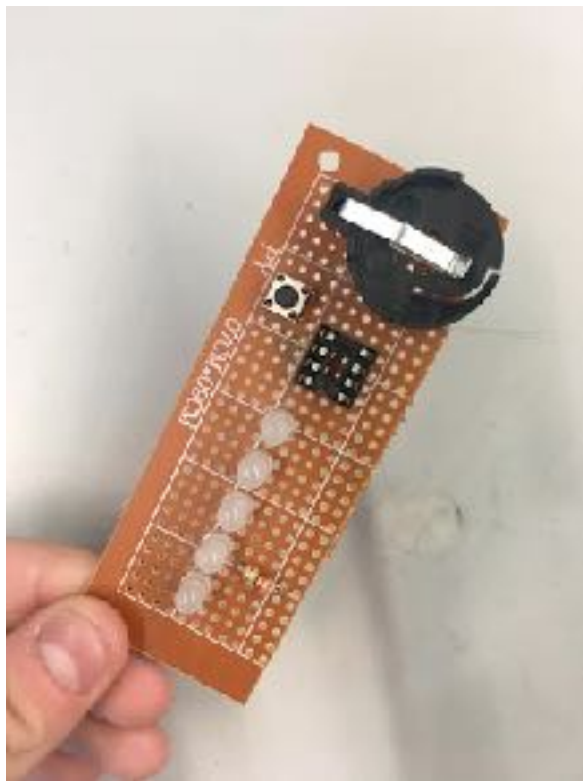
Instructor: Elio Bidinost

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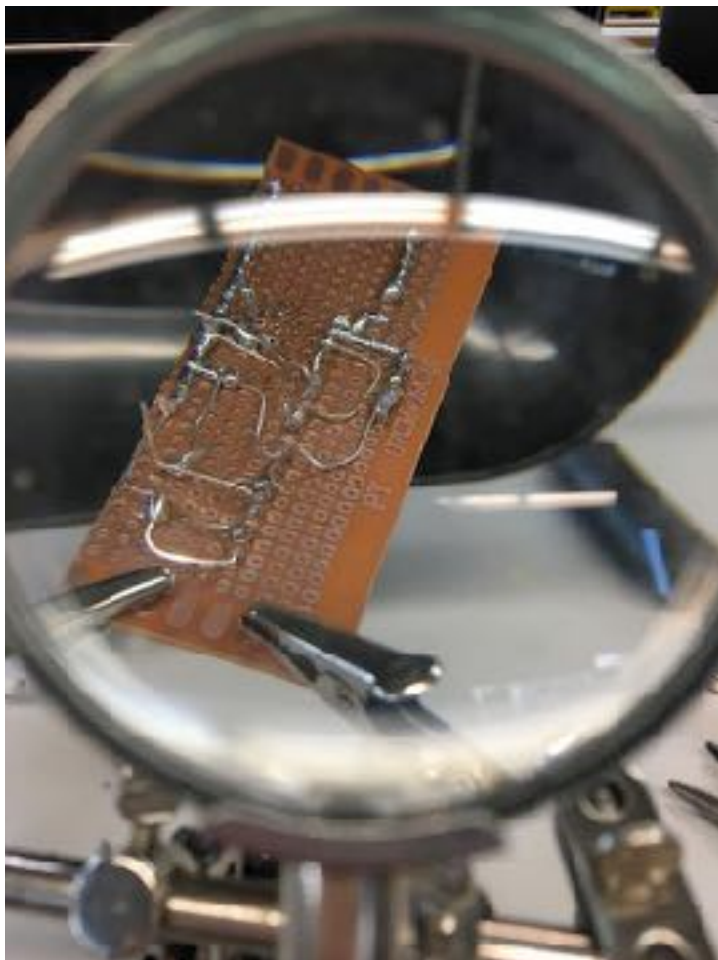
PART ONE:



Pictured here is the first functioning breadboard for an attempt to create the physical schematic for the final result. I first attempted to duplicate the exact look of the given example from the slack file.

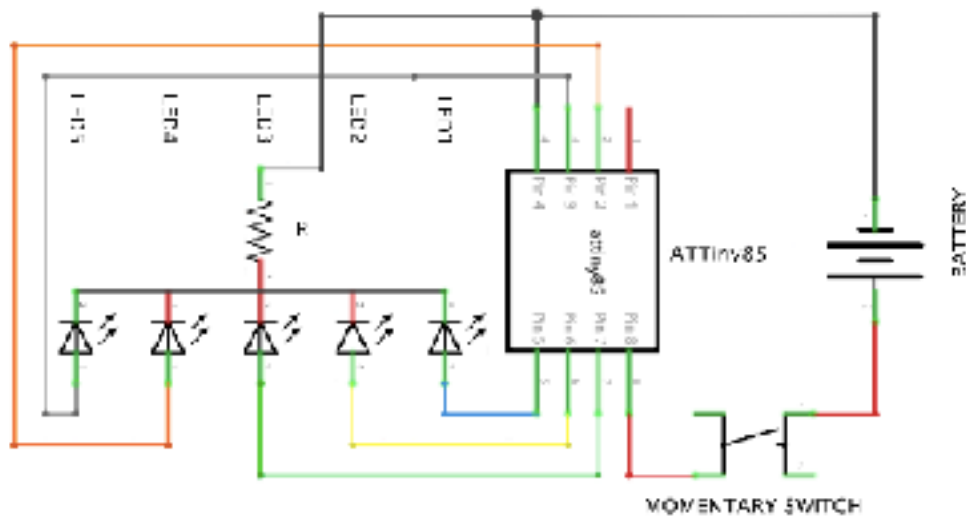


Here pictured is the second attempt at the circuit. The issue with this product is that many of the soldered pieces were not fused together with enough consistency in the solder. And the micro-controller PDIP connector was attached upside down. And the LED's were attached in the wrong order because of this. The Input/Output was also incorrectly positioned as a result of this.

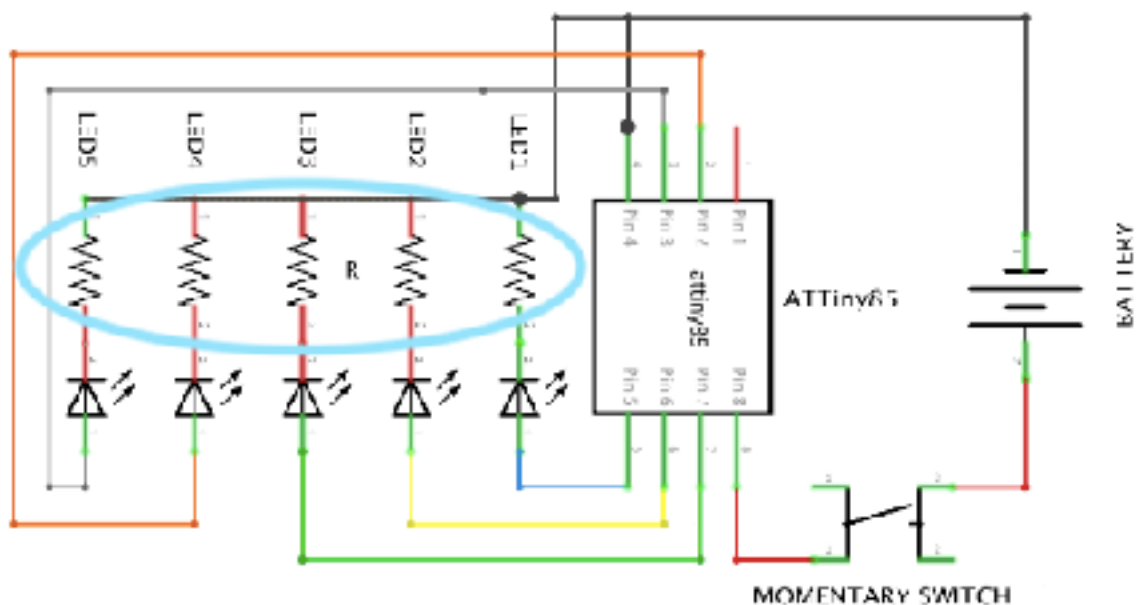


Here is the second desoldering process. I first attempted to desolder the micro-controller from the second board, however the micro-controller was too damaged to continue working. In its place a new micro controller was used, and a new board soldered. On this third board the coin cell battery clip was attached backwards. (the positive and negative connecting to each incorrect respective circuitry pathways.) So this had to be desoldered and repositioned to correctly function.

PART TWO:

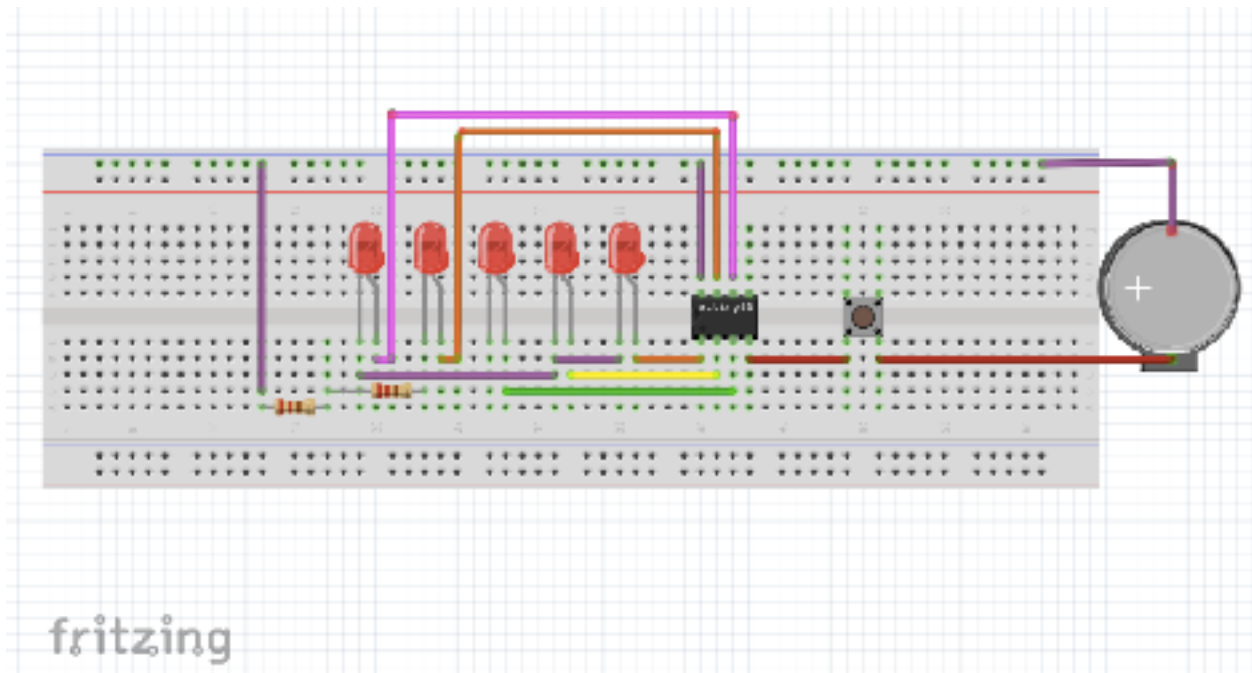


This is the first diagram for the Perceptron-P diagram, and it includes only one resistor to accommodate all five LED's. The resistors role does not change in the Alternative Circuit only that there is one resistor to pair with each LED. This does not have an effect on the brightness of each LED nor does it alter any capabilities originally intended for the finishing functioning product. The is simply a different way of designing to circuit board (perhaps if the object using the circuit board required alterations to hold each LED circuit pathway.)



Circled in light blue in the image pictured above is to point out all the additional resistors placed onto the circuit board. These resistors do not affect the lights. However if they are placed into series rather than parallel, the LED's become brighter. This considered would be a meaningful alteration.

Pictured below is a Fritzing diagram of how this change would look on a breadboard.



By placing the additional resistor to my board I intend to create a meaningful interaction by brightening the LED's so that this difference is visually noticeable to the function of the circuit.

