## 2016 Advanced Arduino

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### Arduino

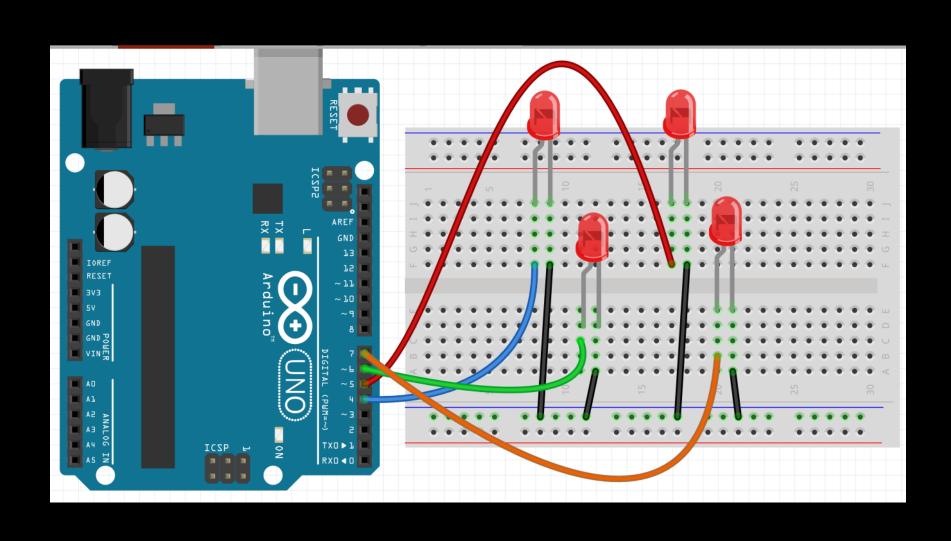


http://www.ted.com/talks/massimo banzi how arduino is open sourcing imagination

#### Massimo Banzi

 Massimo Banzi helped invent the Arduino, a tiny, easy-to-use open-source microcontroller that's inspired thousands of people around the world to make the coolest things they can imagine — from toys to satellite gear. Because, as he says, "You don't need anyone's permission to make something great."

### Serial LED Blink – Hard Ware



### Serial LED Blink – Software

 https://github.com/suakii/2016AdArduno/blob/master/Chapte r1/gs\_1\_SerialLEDBlink/gs\_1\_SerialLEDBlink.ino

### Serial LED Blink –Serial Monitor



## LED Control Using Processing

First upload this code to Arduino

 https://github.com/suakii/2016AdArduno/tree/master/Chapter 1/gs 2 LED\_control\_arduino

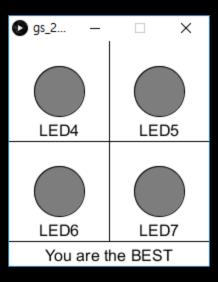
## LED Control Using Processing

Type this code to Processing

 https://github.com/suakii/2016AdArduno/blob/master/Chapte r1/gs\_2\_LED\_control\_processing/gs\_2\_LED\_control\_processing. pde

## LED Control Using Processing

Your are the BEST



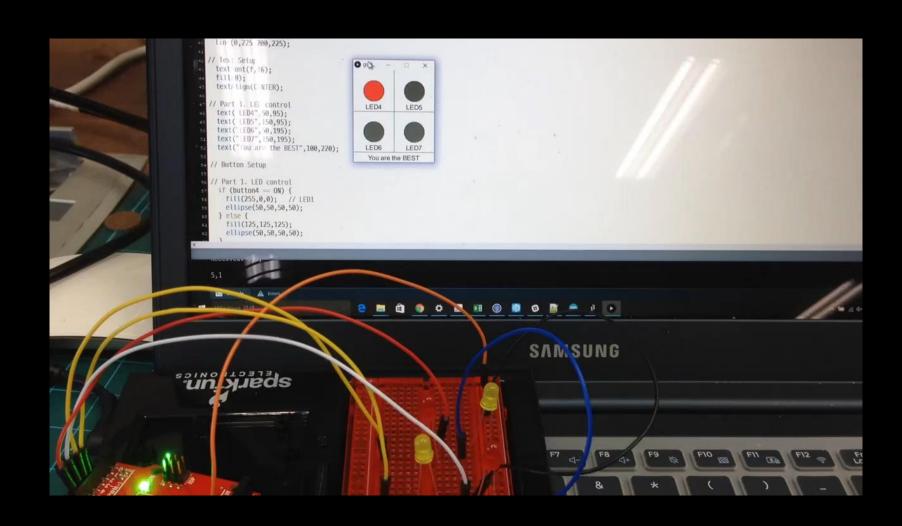
### Reverse: Arduino send to Processing

- Arduino Code
- https://github.com/suakii/2016AdArduno/blob/master/Chapte r1/gs 3 LED\_control\_arduino/gs 3 LED\_control\_arduino.ino

## Reverse: Arduino send to Processing

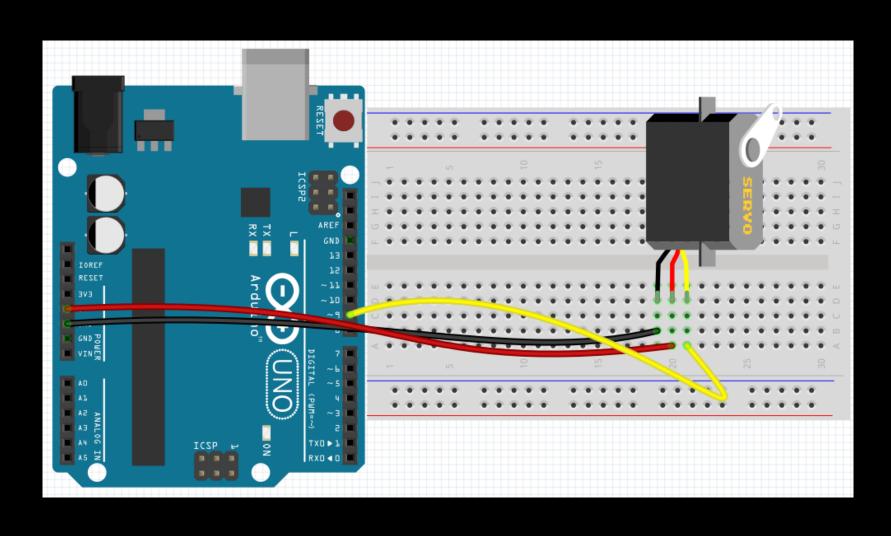
- Processing Code
- https://github.com/suakii/2016AdArduno/blob/master/Chapte r1/gs 3 LED\_control\_processing/gs 3\_LED\_control\_processing. pde

### Reverse: Arduino send to Processing



# Continue Warming UP

## Servo Test - Simple



## Servo Serial using Serial Monitor

 https://github.com/suakii/2016AdArduno/blob/master/Chapte r2/gs\_2\_ServoSerial\_arduino/gs\_2\_ServoSerial\_arduino.ino

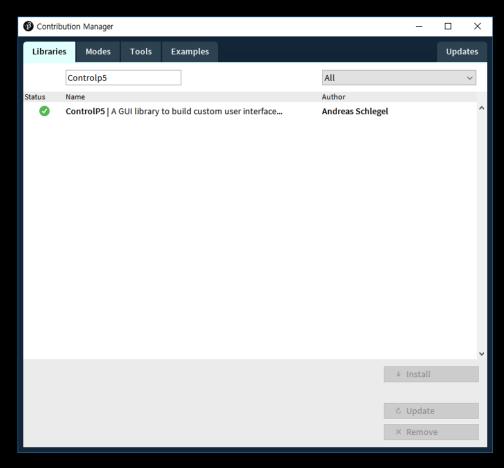
//What is code?

### Send Rotate value to Arduino



## ServoSerial Processing

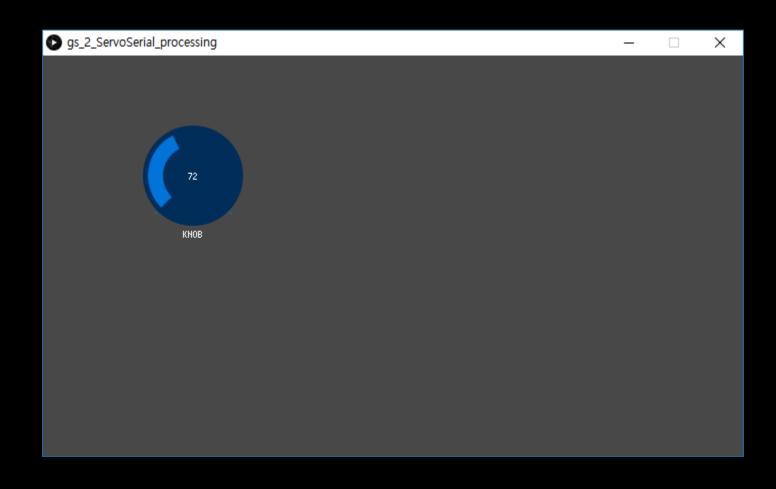
• First Install ControlP5 for UI at Processing



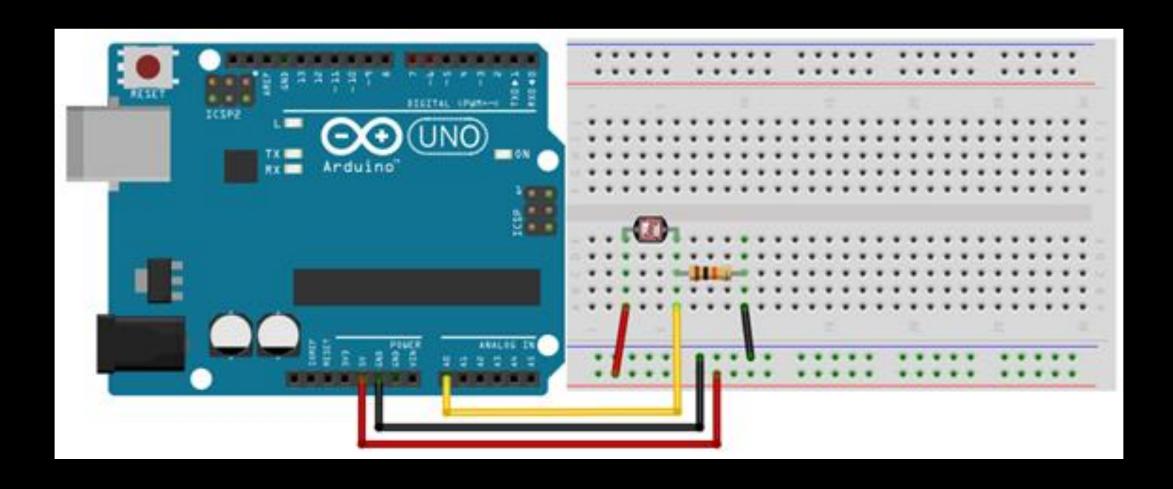
## ServoSerial Processing

 https://github.com/suakii/2016AdArduno/blob/master/Chapte r2/gs\_2\_ServoSerial\_processing/gs\_2\_ServoSerial\_processing.p de

## ServoSerial Processing - Cool



## ServoTwoLDR – Light Tracking Simple



## ServoTwoLDR – Light Tracking Simple

 https://github.com/suakii/2016AdArduno/blob/master/Chapte r2/gs\_4\_ServoTwoLDR/gs\_4\_ServoTwoLDR.ino

# CU Later....