

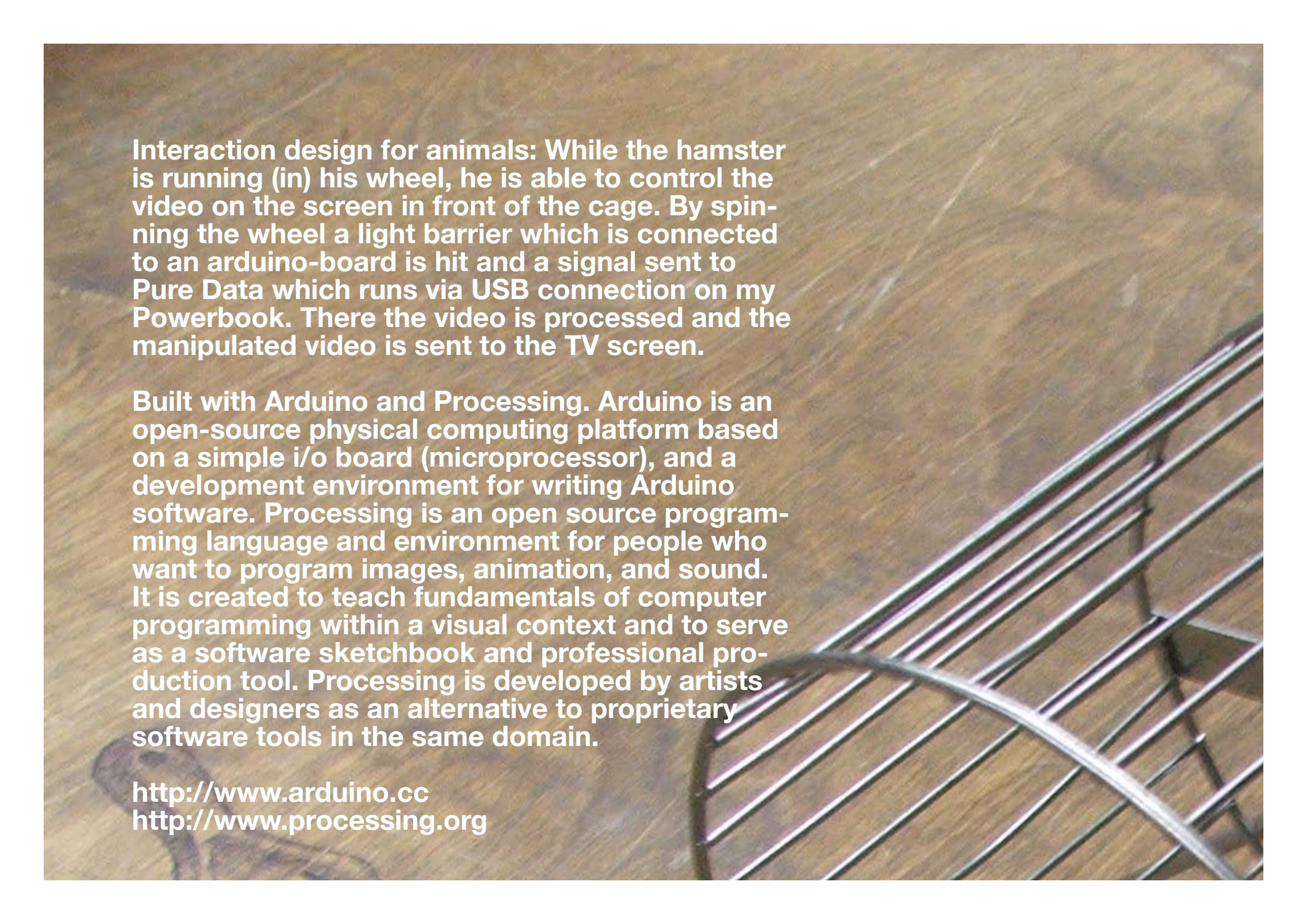


HOMETRAINER

»WORK IN PROGRSS«

A PHYSICAL COMPUTING PROJECT
BY STEFAN KAINBACHER, 2007
SPACE&DESIGNSTRATEGIES, LINZ

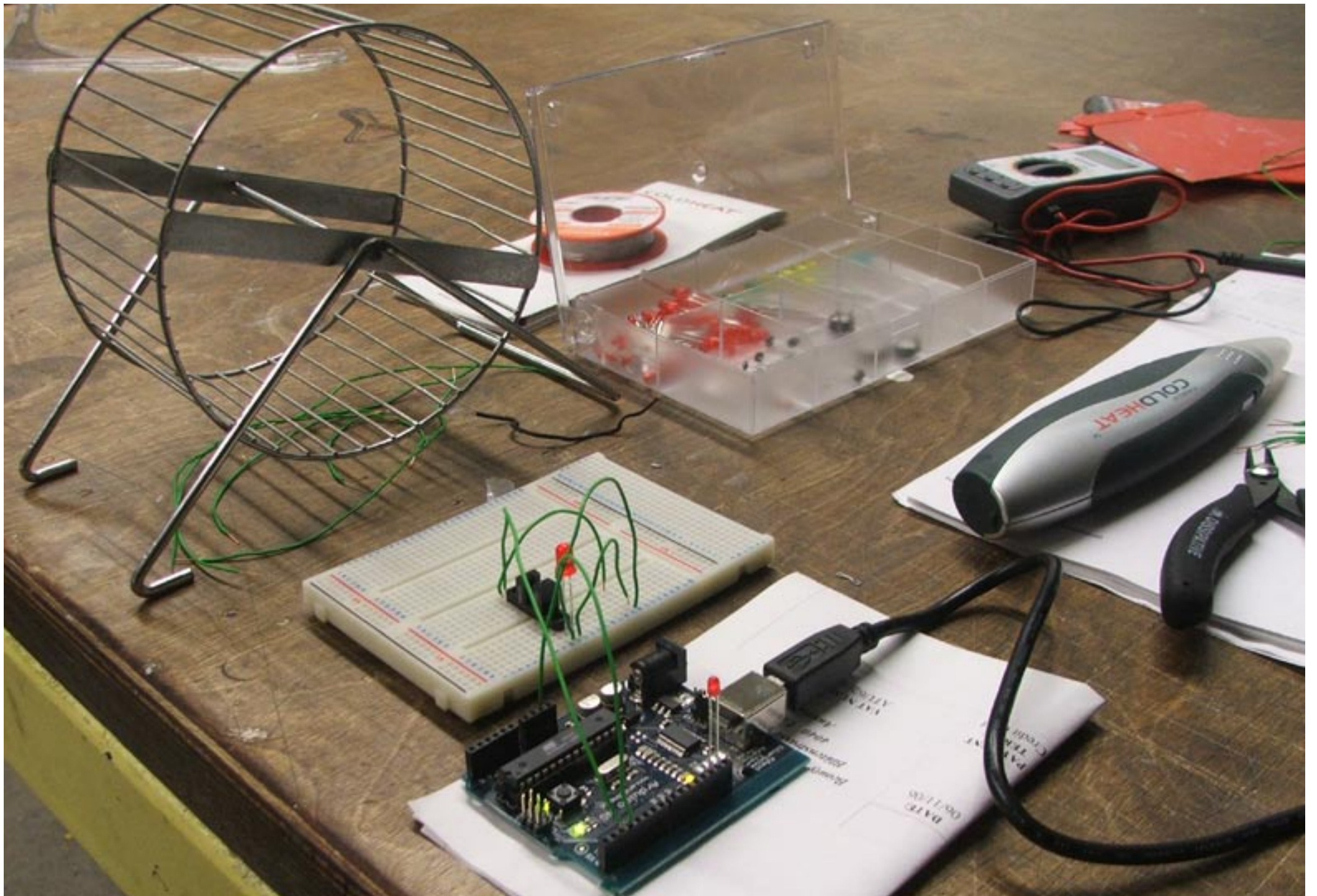
<http://lab.neongolden.net/archives/130>



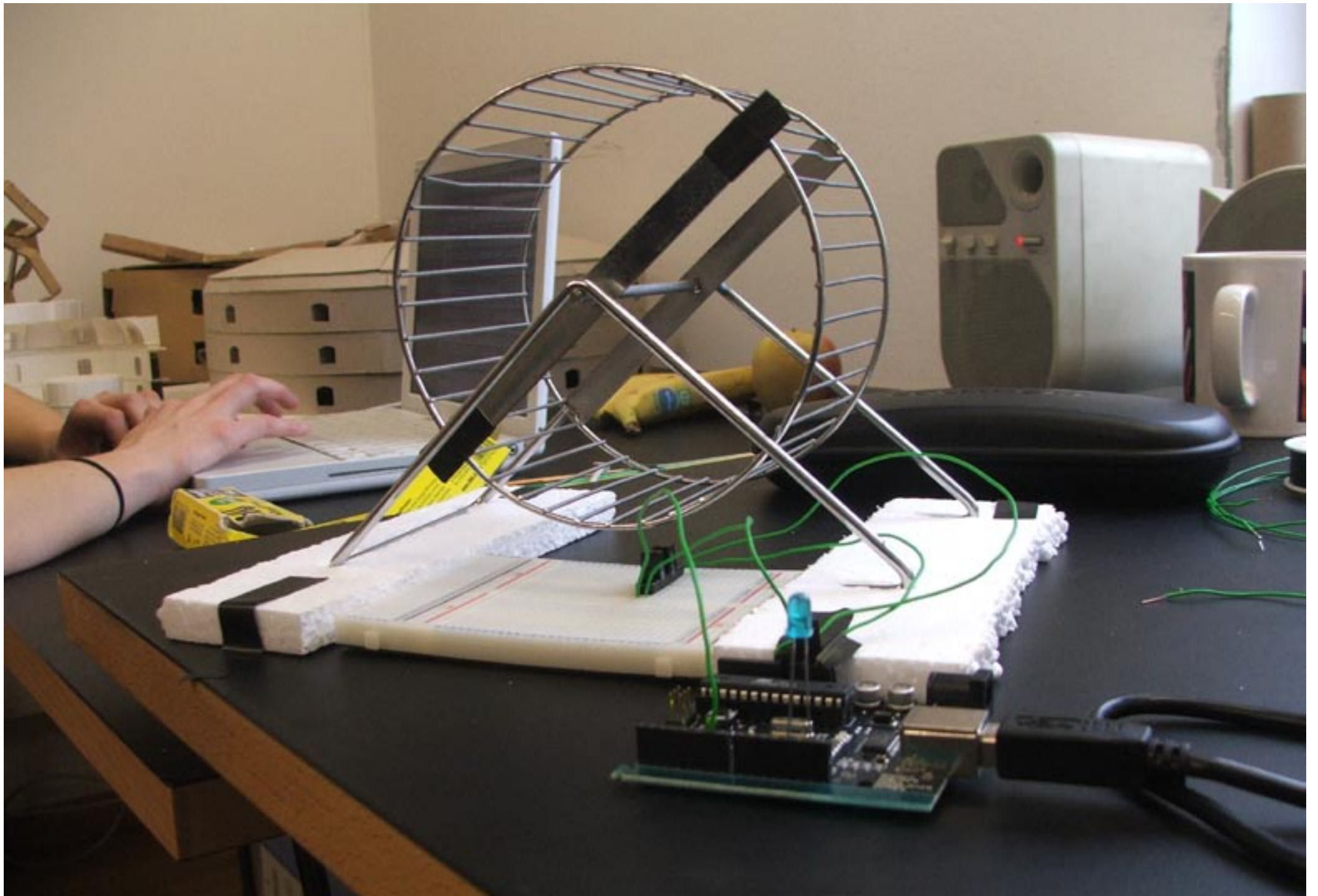
Interaction design for animals: While the hamster is running (in) his wheel, he is able to control the video on the screen in front of the cage. By spinning the wheel a light barrier which is connected to an arduino-board is hit and a signal sent to Pure Data which runs via USB connection on my Powerbook. There the video is processed and the manipulated video is sent to the TV screen.

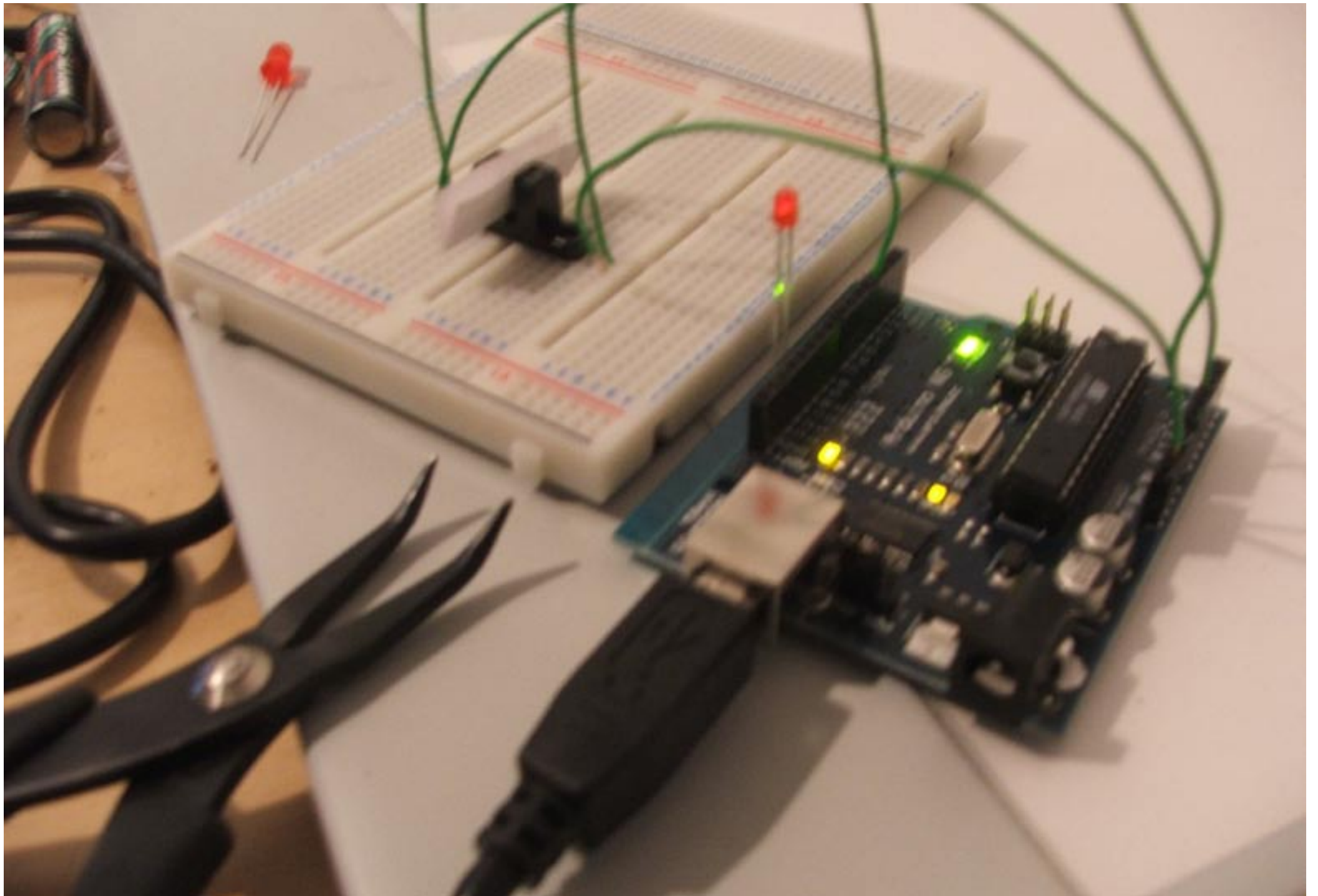
Built with Arduino and Processing. Arduino is an open-source physical computing platform based on a simple i/o board (microprocessor), and a development environment for writing Arduino software. Processing is an open source programming language and environment for people who want to program images, animation, and sound. It is created to teach fundamentals of computer programming within a visual context and to serve as a software sketchbook and professional production tool. Processing is developed by artists and designers as an alternative to proprietary software tools in the same domain.

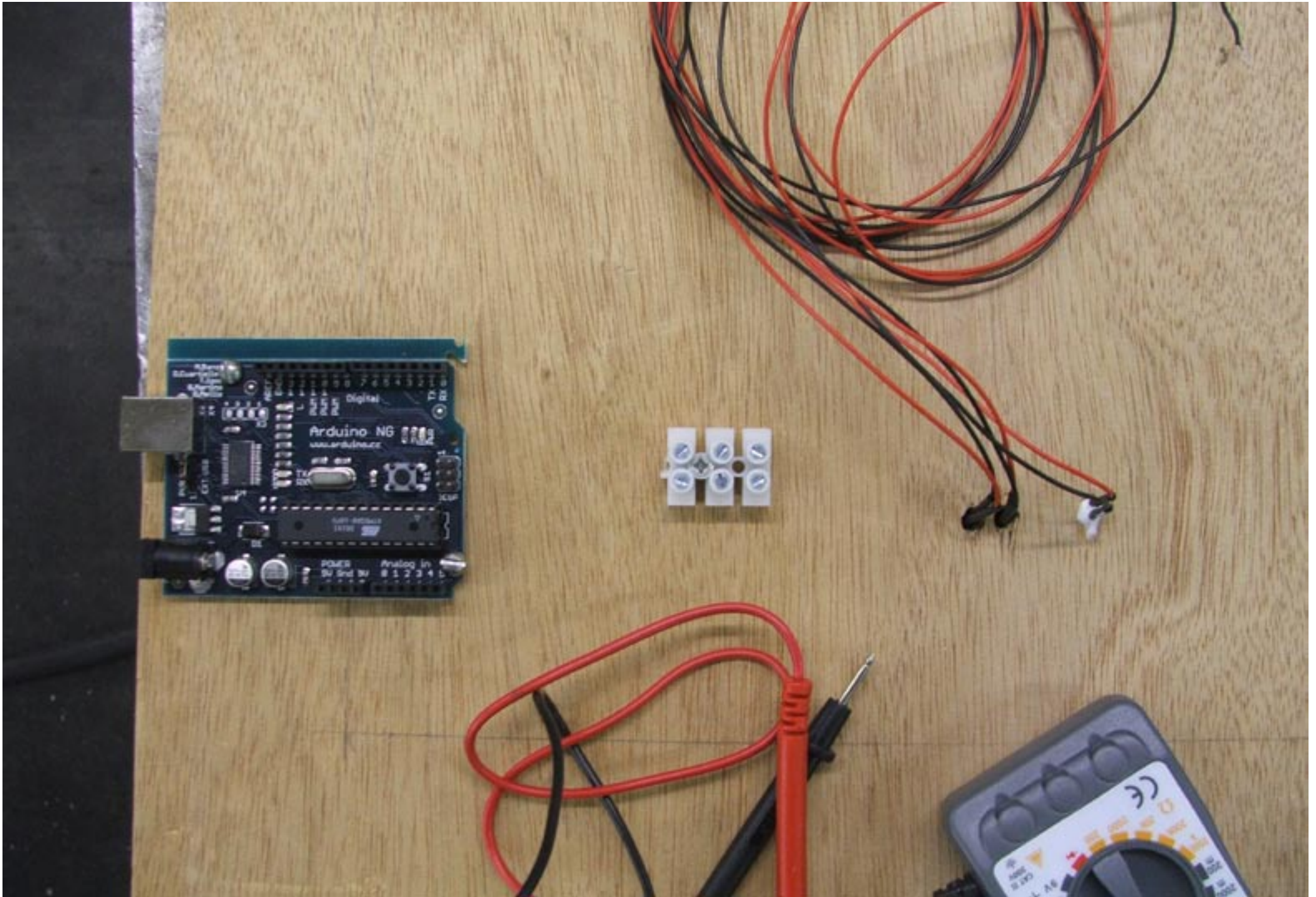
<http://www.arduino.cc>
<http://www.processing.org>

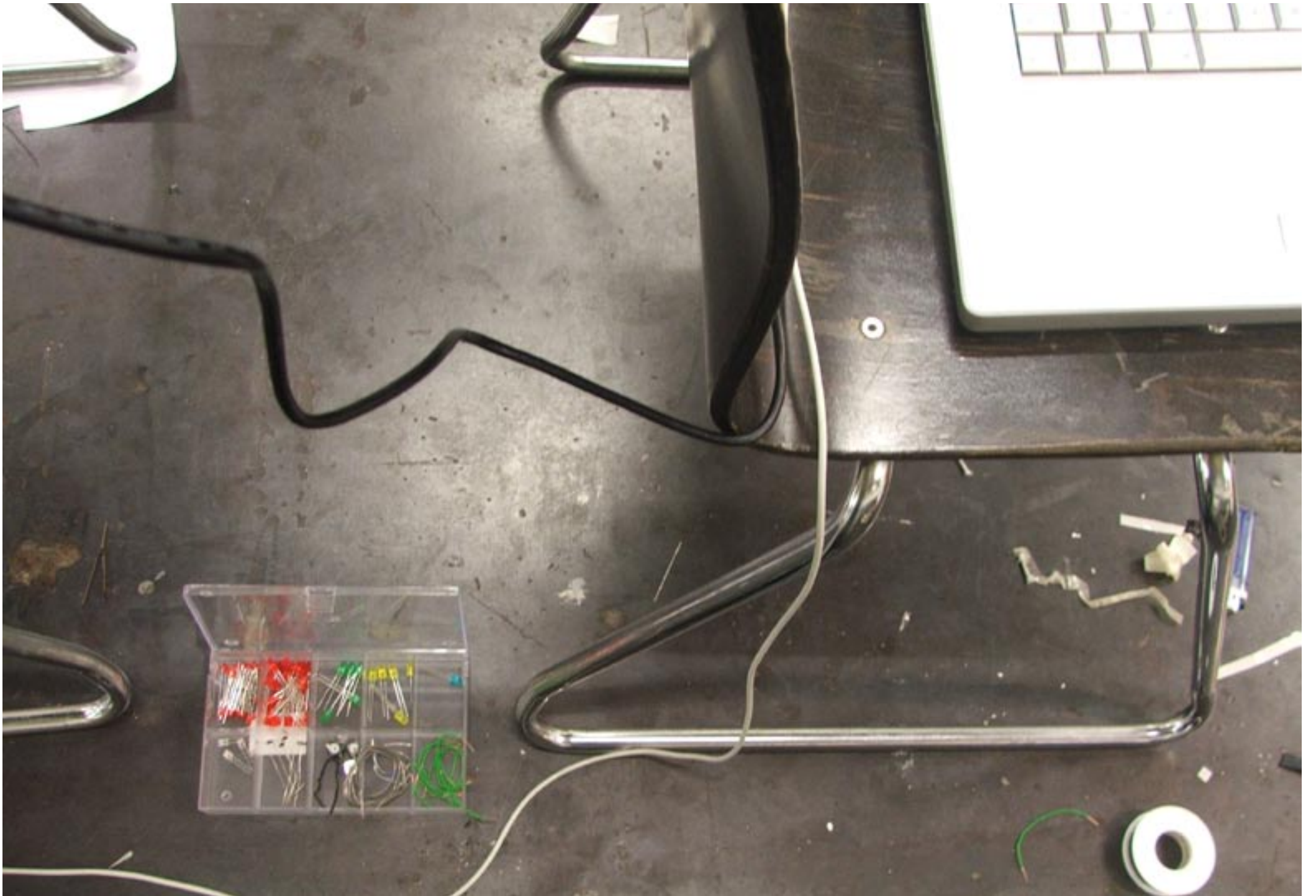


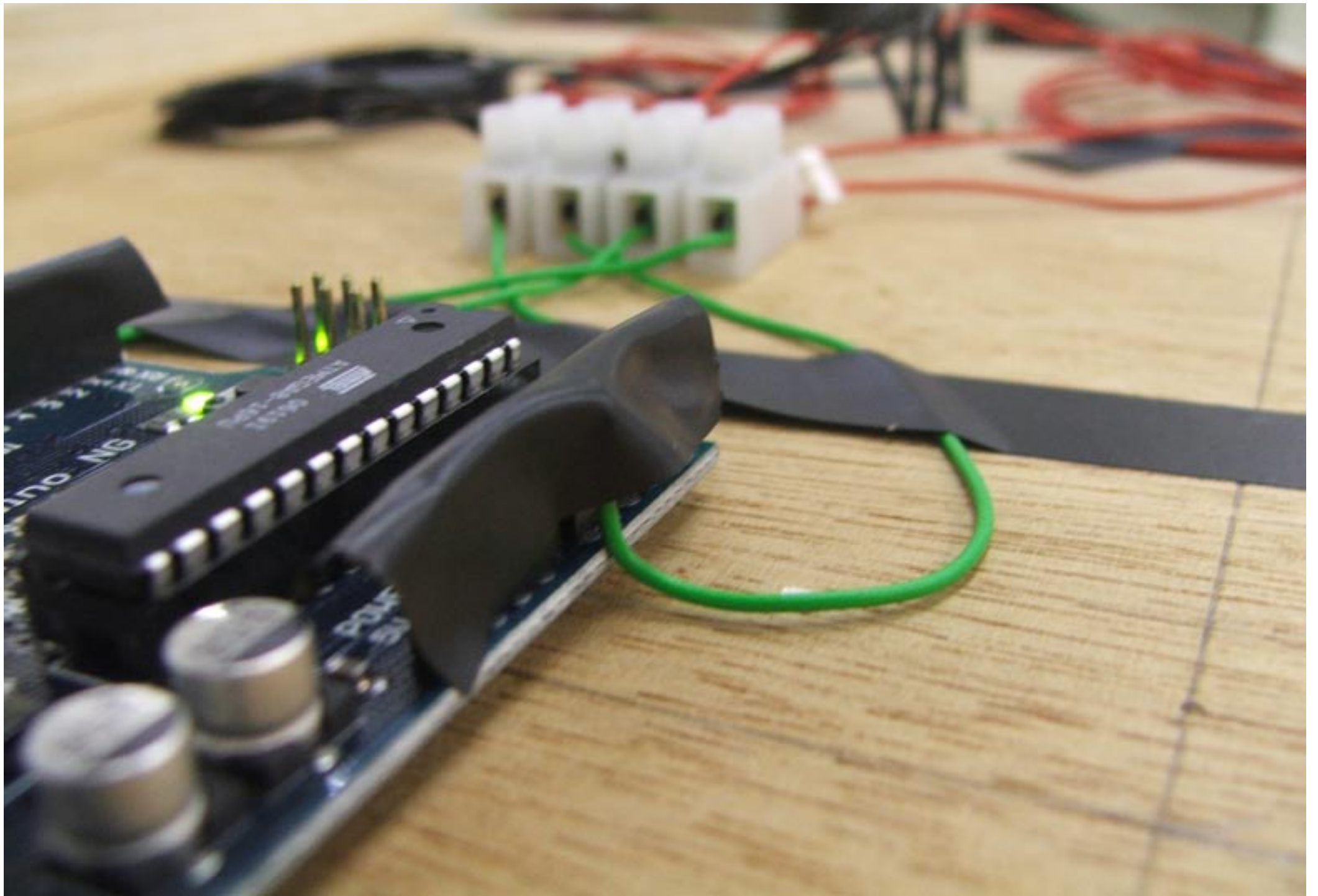




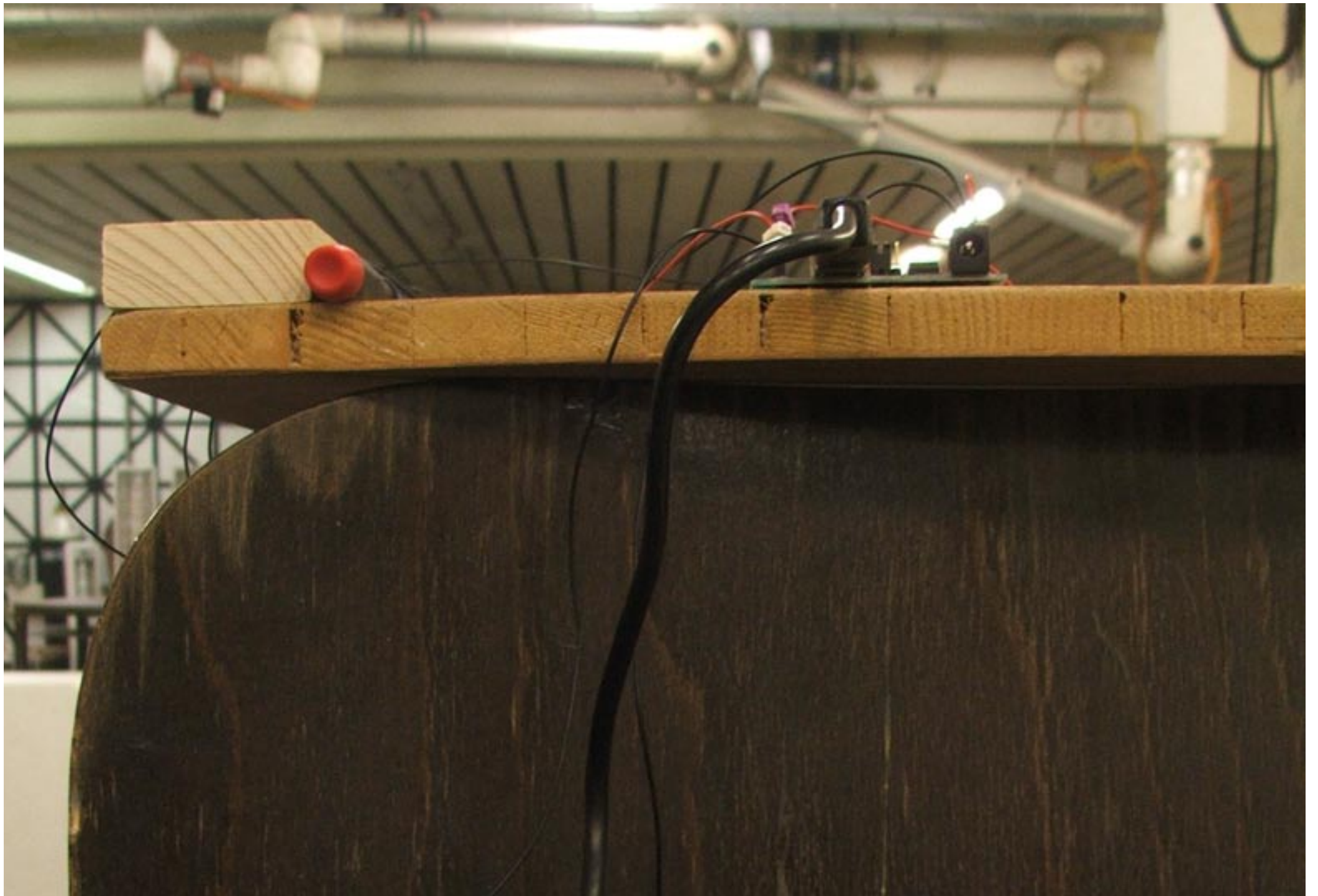












Arduino File Edit Sketch Tools Help



Ardui



Serial Monitor

sketch_070128a_hamster_prototyp_2

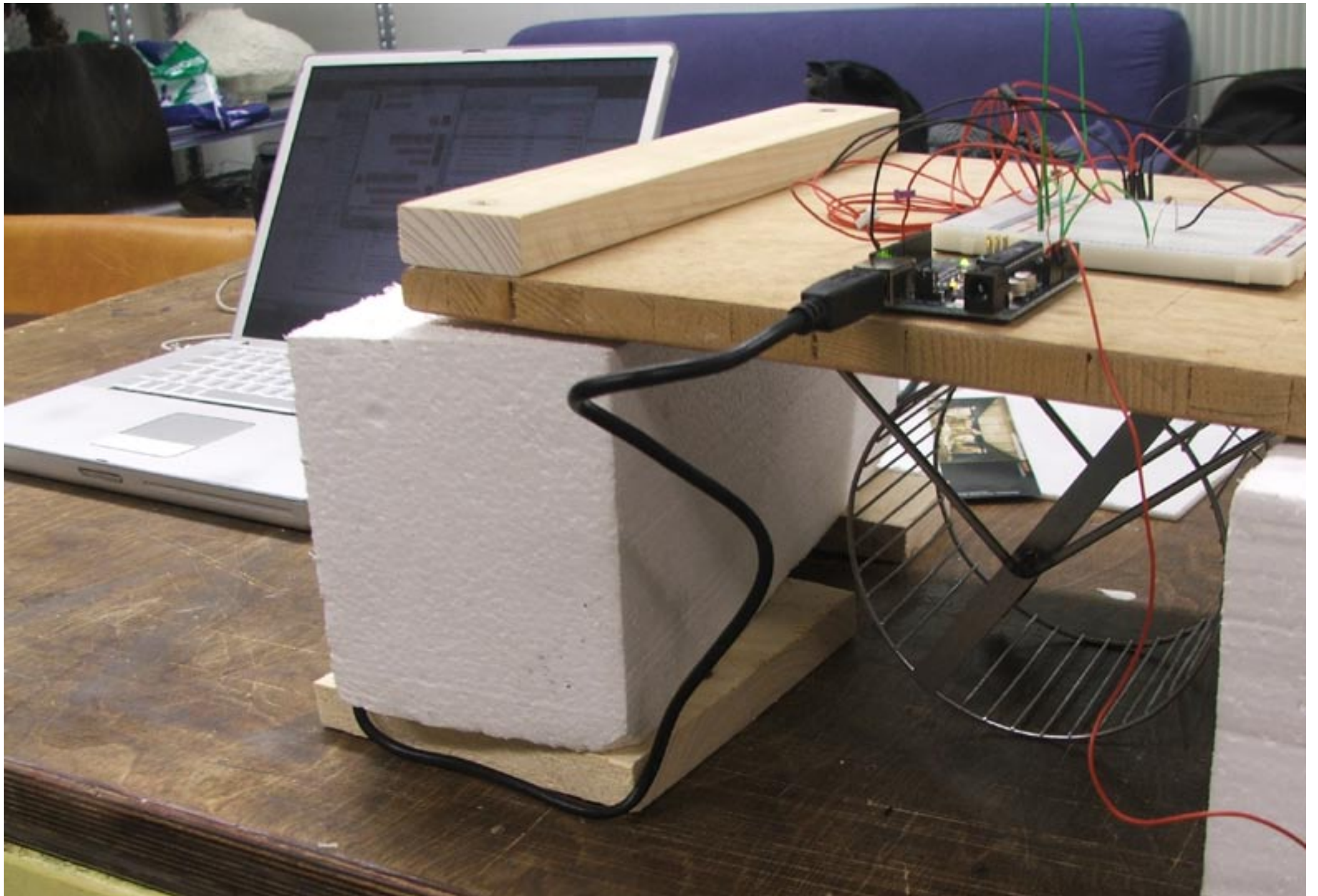
```
int sensorPin = 8;
int emitterPin = 7;
int ledPin = 9;
int val = 0;

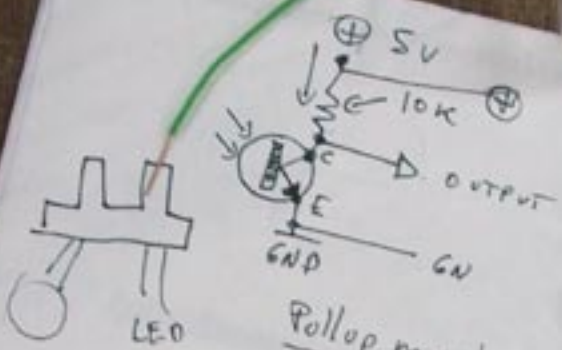
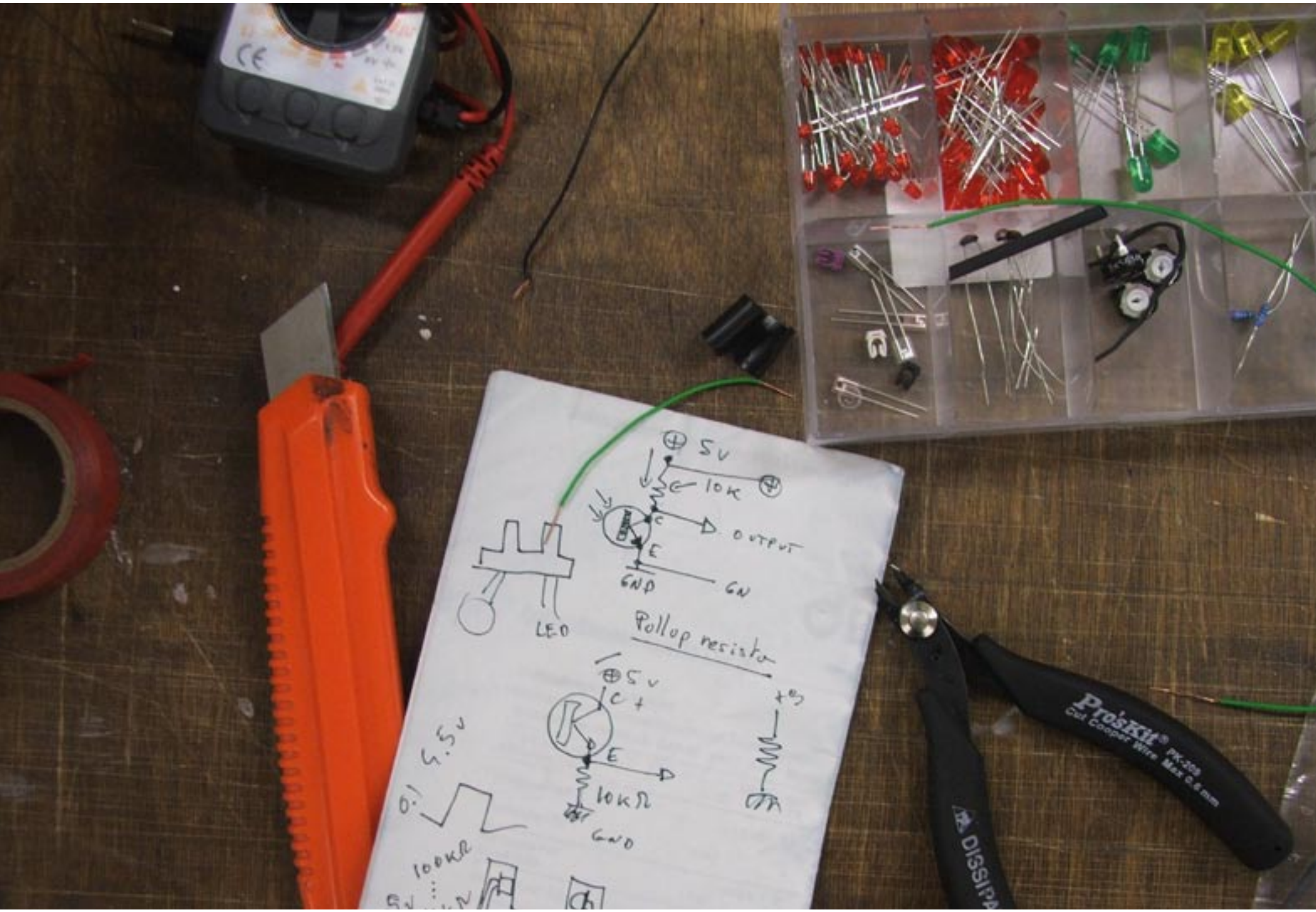
void setup() {
  pinMode(emitterPin, OUTPUT);
  pinMode(ledPin, OUTPUT);
  Serial.begin(9600);
  digitalWrite(emitterPin, HIGH);
}

void loop() {
  //digitalWrite(emitterPin, HIGH);

  val = analogRead(sensorPin);
  Serial.println(val);

  if (val > 100){
    digitalWrite(ledPin, HIGH);
  }
}
```





Pullup resistor

