

# Hands on activities 2

## - Analog data collection

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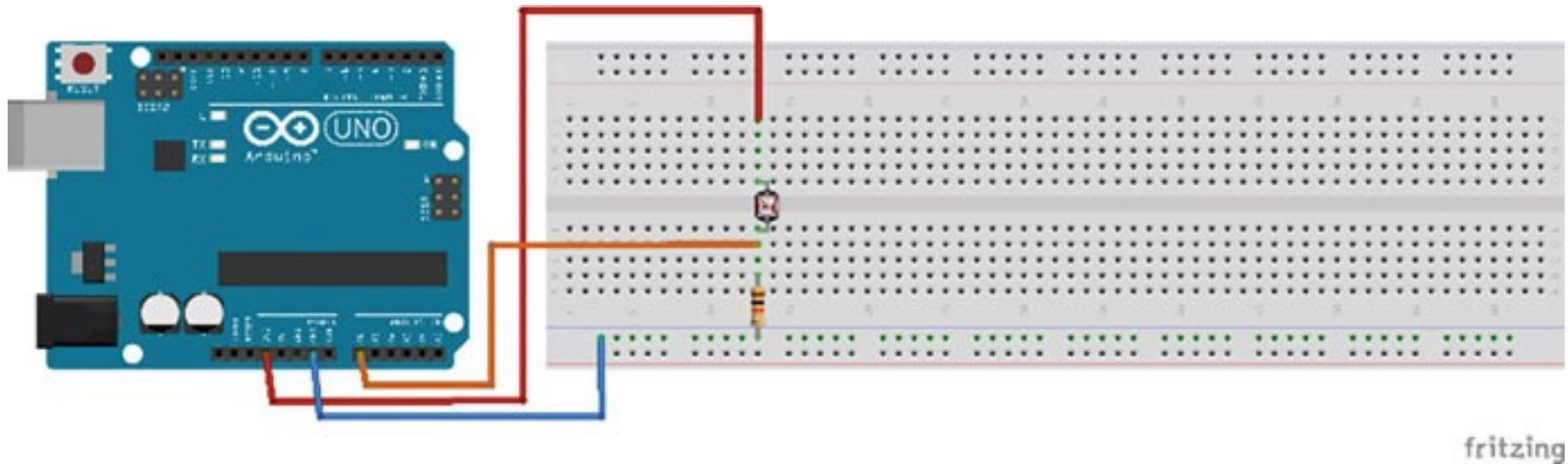
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**Embedded Systems/Cyber Physical Systems**

**CS 4380 / CS 5331**

# Example 1: Light sensor hardware

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# Example 1: Light sensor code

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```
const int analogInPin = A0;

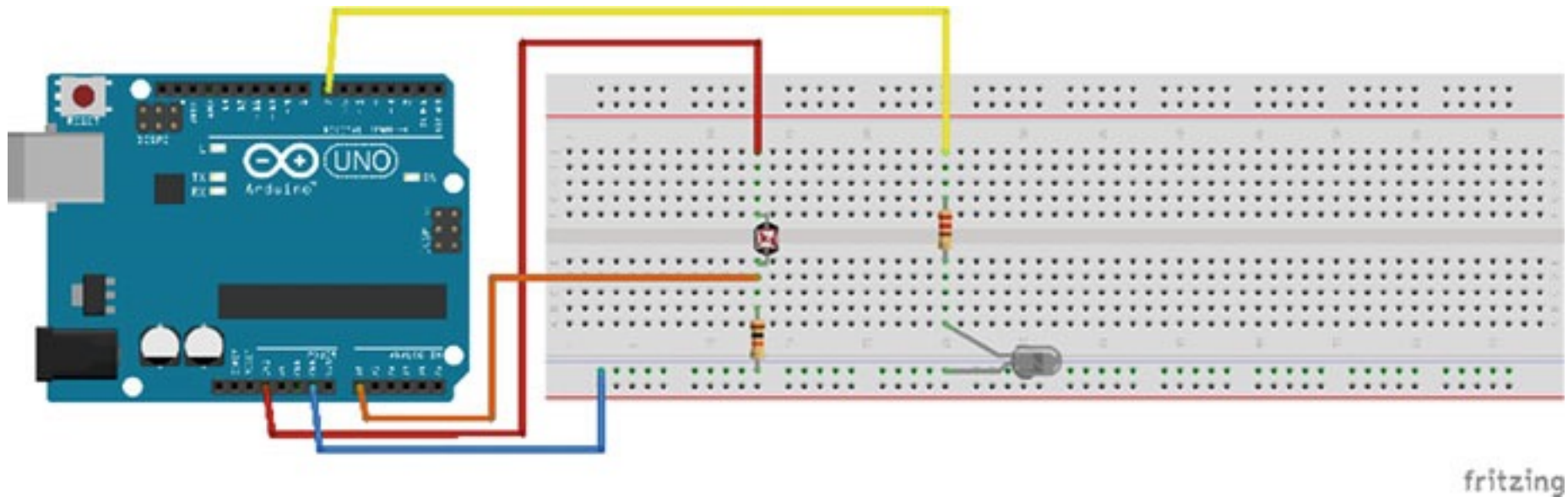
int sensorValue = 0;

void setup() {
  Serial.begin(9600);
}

void loop() {
  sensorValue = analogRead(analogInPin);
  Serial.print("Analog sensor value = ");
  Serial.println(sensorValue);
  delay(100);
}
```

# Example 2: Night Light hardware

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# Example 2: Night Light code

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```
const int analogInPin = A0;
int sensorValue = 0;
void setup() {
  Serial.begin(9600);
  pinMode(7, OUTPUT);
}
void loop() {
  sensorValue = analogRead(analogInPin);
  Serial.print("Analog sensor value = ");
  Serial.println(sensorValue);
  if (sensorValue < 550) {
    digitalWrite(7, HIGH);
  } else {
    digitalWrite(7, LOW);
  }
  delay(100);
}
```