



Class Journal

Lan Luo | WNW725 02 | Interactive Physical Systems | Fall 2019

Academy of Art University, Web Design & New Media

Idea 1: Air Quality Monitor + AR Poster

It is a device that measures CO2 levels, temperatures, and humidity. Users can see the result with their phone using AR.



Inspirations:

<https://www.hackster.io/antonramenskiy/air-surfer-a2d80f>



Idea 1: Air Quality Monitor + AR Poster

Hardware Components:

Arduino Nano R3

DFRobot Gravity: Analog LPG Gas Sensor (MQ5) For Arduino

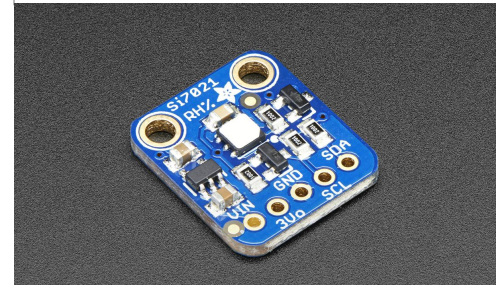
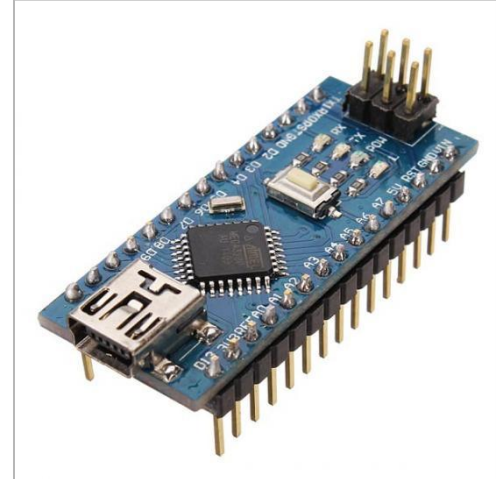
DFRobot Carbon Monoxide Sensor (MQ7)

Temperature&humidity sensor Si7021 - 2\$(118Rub)

Software Apps:

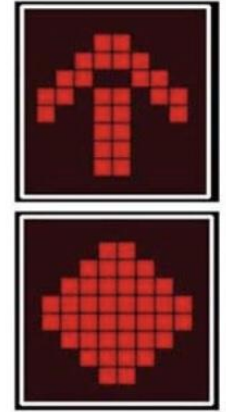
Unity

Arduino IDE



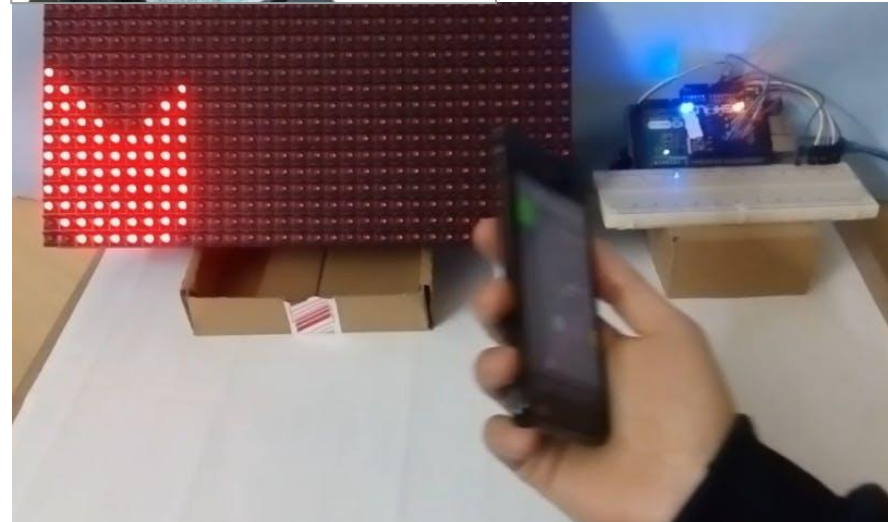
Idea 2: Bike Turning Signal Light

It is a signal light which can be controlled by hand gestures so bikers can be safe when biking at night.



Inspirations:

https://www.hackster.io/Mostafa_Abcreno/led-matrix-wave-moves-with-hand-183166



Idea 2: Bike Turning Signal Light

Hardware Components:

LED Matrix (15 *15)

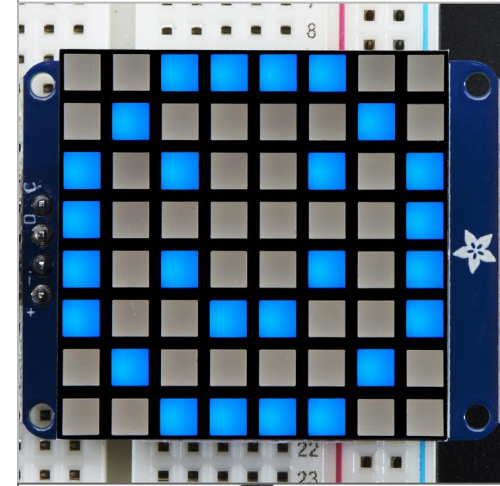
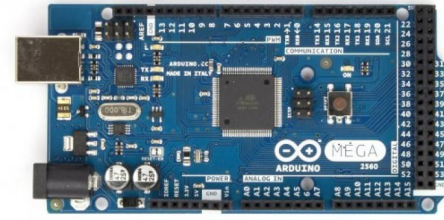
Arduino Mega 2560 & Genuino Mega 2560

1Sheeld

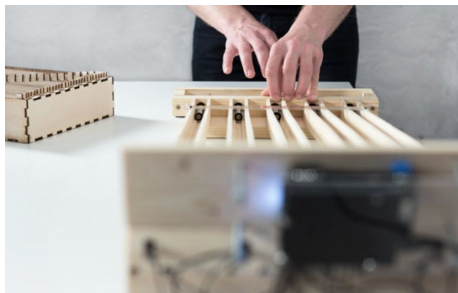
iOS device

Software Apps:

Arduino IDE



Inspirations



[A tribute to 5-bit Baudot code](#)

Julian Hespenheide is an interaction designer based in Germany who submitted to Arduino blogpost a writing machine called [émile](#).



[Measure time like an egyptian with an Arduino hourglass](#)

[Todo](#) is the italian design consultancy and creative agency taking care of Arduino and Genuino brand identity and interviewed [in this previous blogpost](#).



[Caravaggio, A Drawing Machine](#)

Caravaggio is a drawing machine able to replicate a digital image using a pen and a continuous line.

Moodboard

