# Thermal Photography "Chester" Guo, Matthew Palmer, Pedro Silva



## Objective

- Uses temperature sensor to change the color of a NeoPixel ring
- Create heat map via long exposure photography

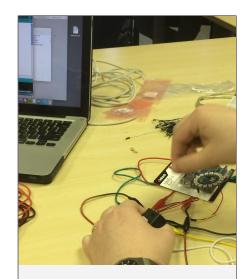


#### **Materials**

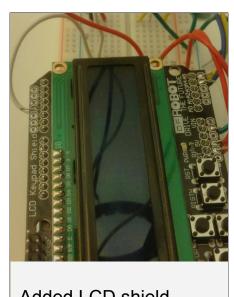
- Arduino Uno
- LED keyboard shield
- MLX90614 non-contact
  IR thermometer (3v)
- 16x NeoPixel Ring
- 9 Volt Battery and Battery Holder
- 4.7k Ohm resistors \*2
- Wires



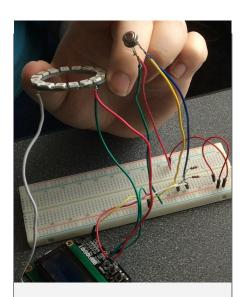
### **Iterations**



Started with case finding.



Added LCD shield.



Power Issue.







# Challenges

- Icd power challenges
- lcd programming
- running libraries

#### **Contributions**

- temperature calibration
- Icd
- a full documentation

