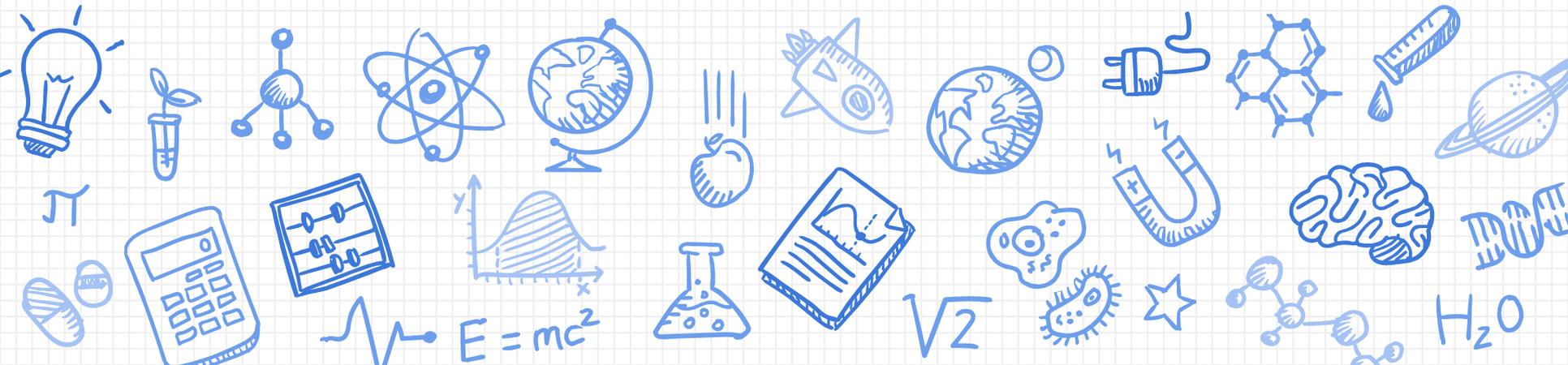


# EE16A Lab: Touchscreen 2

Tues 2-5pm

GSI: Andy Wang

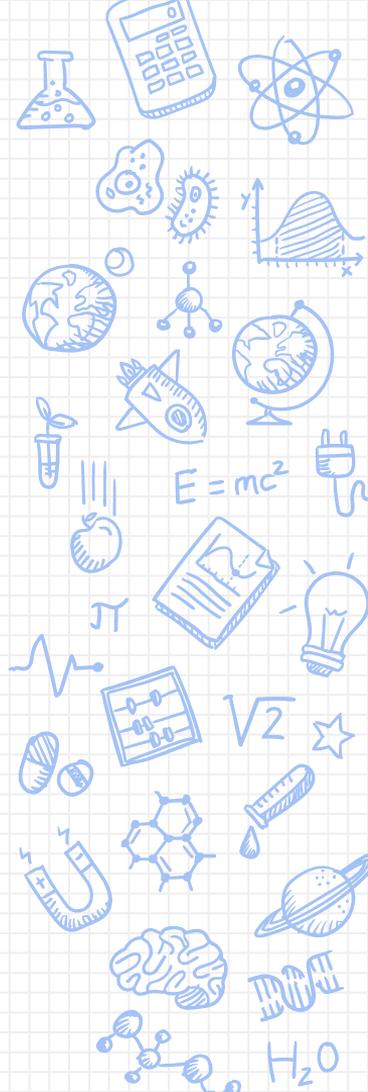
LA: Matt, Navneeth, Yidan



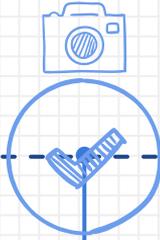
# Announcements

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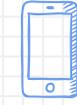
- ✘ Buffer Week Next Week
  - ✘ Check Piazza for specific buffer week schedule
  - ✘ You will be allowed to make up only **one** lab
  - ✘ You can make up **Imaging 3** as the one lab for the week
- ✘ Lab Grades on Gradescope
  - ✘ If you see a discrepancy, please email me [andy.wang@berkeley.edu](mailto:andy.wang@berkeley.edu) . Or come see me after lab today at 5pm.



# Semester Outline



Imaging  
Module



Touchscreen  
Module

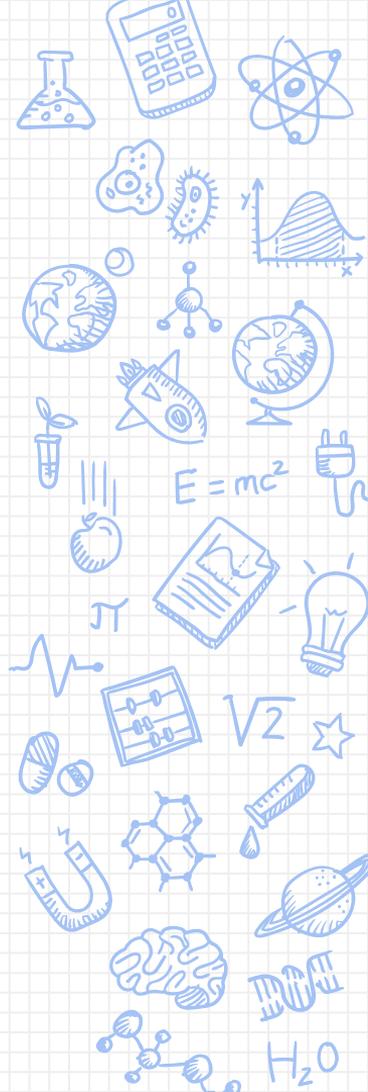


Locationing  
Module

# This Week: Resistive Touchscreen

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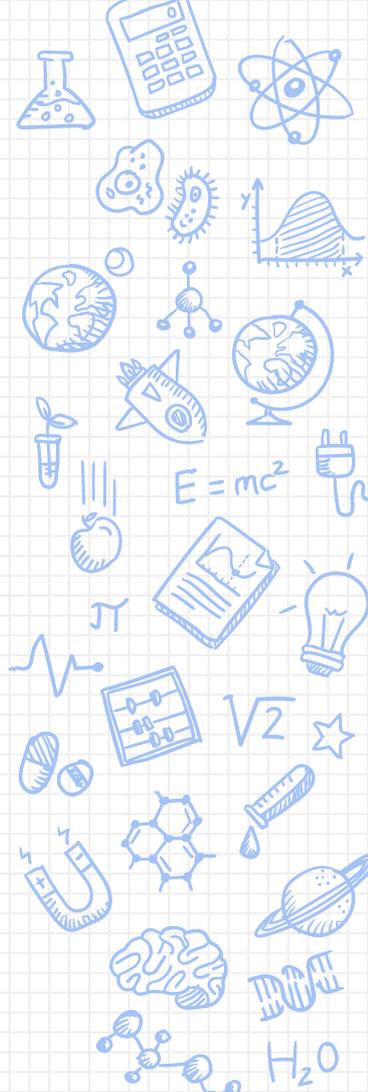
- ✘ Build a resistive touchscreen
- ✘ Determine position of touch based on voltage
- ✘ Python/MSP: `get_loc()`



# Multimeter

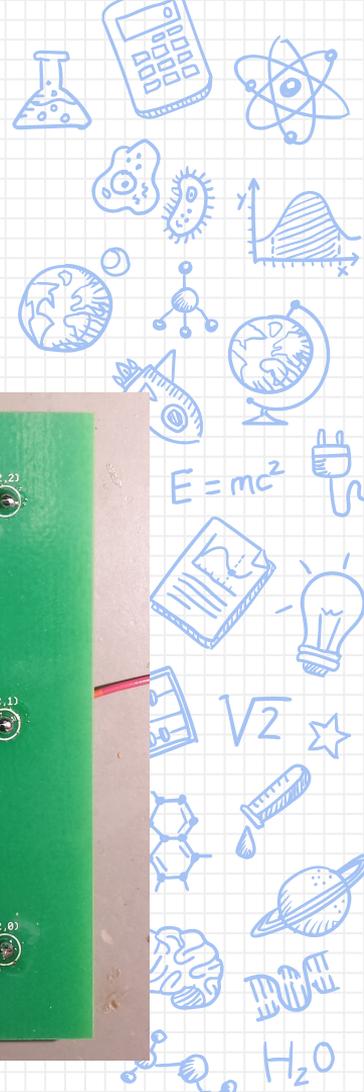
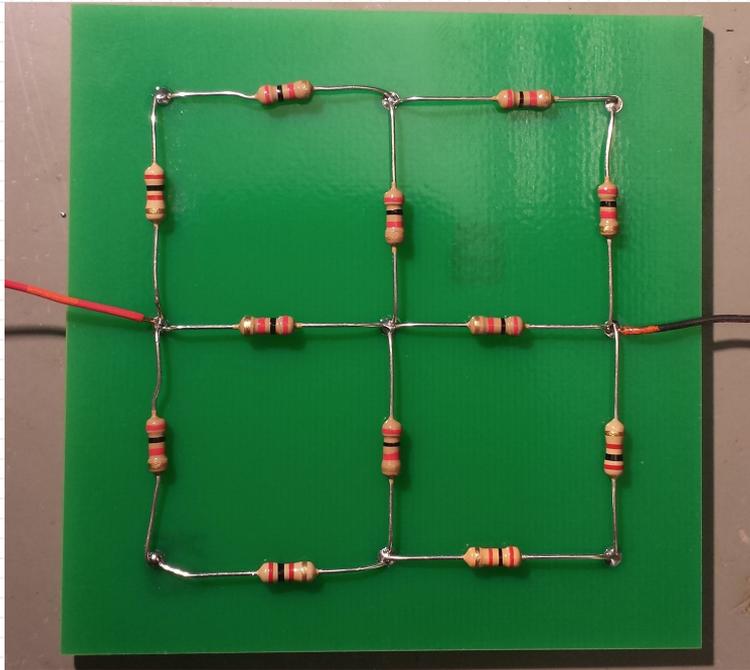
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- ✗ Like oscilloscope, but only a single DC measurement
- ✗ Connect the leads to different places to measure current vs voltage
- ✗  $\Omega$ : (Ohms) Resistance      I: (Amps) Current



# Resistive Touchscreen – 2 Layers

Bottom Layer: Resistive Layer

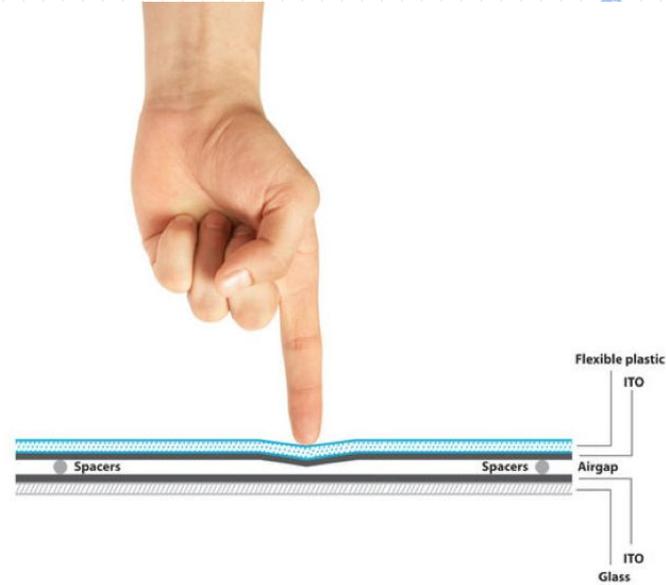




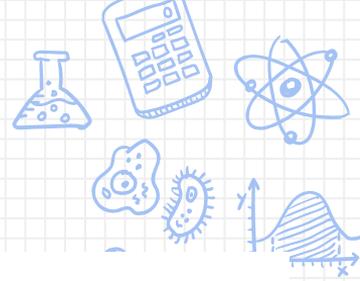
# Resistive Touchscreen

- ✘ Physical touch result in physical contact between top and bottom layers

EX: Nokia N900, Nokia N97 Mini, LG Optimus, LG GW620



Resistive touchscreen



# Resistive Touchscreen

- ✗ Measure some voltages from which we can infer position of touch
- ✗ Take measurements and compute position using microcontroller

