21M.370 Digital Instrument Design

Lab 6 - Apr 1

For Apr 1, you will create a simple photocell instrument and make a short video to share with the class. Here are the specifics of the assignment:

1. Your instrument will use at least one photocell.
2. Your instrument will include at least one other control (button, potentiiometer, joystick, etc.)
3. You will choose one of the PD patches in the PureData/mappingExamples folder as the basis for your instrument
4. You will define one mapping between a sensor and one synthesis parameter, with the following details:
    1. Performance gesture
    2. Range of the sensor data responding to this gesture
    3. Target range of the synthesis parameter
    4. Clipping range for mapping the sensor data to synthesis
    5. Exponential curve for mapping the sensor data to synthesis
    6. These details should relate to the instrument as used in the video,
5. Make a 60-90s long video performing with your instrument and send a link to Ian (either youtube or download).

Discussion topics for Apr 1:

1. What are the areas you find to have creative potential? Sensors, mechanical layout/design, mapping, synthesis
    - what areas for improvement
    - what was challenging / easy, both technically and conceptually
2. What kind of instrument **could** you make right now given 1 solid week to focus on building it?

3. What other kinds of instruments are possible based on CdS photocells (and potentially other sensors/controls)?