

Preparation

Read *Computer vision for artists and designers* by Golan Levin (2006):
www.flong.com/texts/essays/essay_cvad/

Download JMyron Library for Processing:
<http://webcamxtra.sourceforge.net/download.shtml>

Installation Instructions

Copy the "JMyron" folder found in this directory into the Processing/libraries directory.
Copy the "JMyron Examples" folder into your Processing Examples folder.

IMPORTANT FOR WINDOWS USERS:

There is a folder called "Extra DLLs" - those are DLLs that JMyron depends on so make sure they're copied into your system's DLL search path - such as the Processing root directory, or even C:\windows\System32.

If Processing is already running, then restart it.

To import the library into your sketch, choose the menu "Sketch > Import Library > JMyron" and you will see "import JMyron.*;" appear at the top of the sketch. From here, please see the Examples folder for simple ways to see the camera. The most basic example is the "Myron_simpleCamera" sketch.

- 1. Check out a tripod and webcam/DVCam (plus firewire cable*) from the library for the lab.**

** If you use a DVCam make sure you have a firewire port on your laptop and that you get the correct type of firewire cable. Most of you will need 4 Pin to 4 Pin types. Test the connection before coming to lab!)*

IAT 884
Workshop Week 9
Computer Vision

In Class Exercise:

Equipment:

Digital Camcorder or webcam (available at the library)
Tripod (Available at the library)
Firewire Cable (to connect DVCam to the computer)
Colored Objects (Supplied)
Laptop

Activity:

Implement a simple camera vision application using colored objects to trigger screen events. These events can be related to absolute positioning of objects, relative positioning in relation to each other, number of objects present, color of the object detected, or any other combination you can think of. I will provide some basic source code for you to work from.

Resources:

Start up issues: <http://mrl.nyu.edu/~perlin/courses/fall2006mm/using-jmyron.html>
JMyron Reference: <http://webcamextra.sourceforge.net/reference.shtml>
JMyron forum: https://sourceforge.net/forum/?group_id=79235
Processing Computer Vision Application Examples (Japanese Website):
www.vision.cs.chubu.ac.jp/VU/html
Computer Vision Code: www.flong.com/texts/essays/essay_cvad/ (After Article)

*Windows Users: If you do everything above and can't get the code to run, try downloading this small piece of software called WinVDIG. It can be downloaded here:

<http://www.eden.net.nz/7/20071008/>