

# METR4202 / METR7202 -- Robotics

## Lab 2 – Pre-Lab: Seeing Past the Camera Chimera

---

The objective of this pre-lab is to give some tips and tools for connecting the Microsoft LifeCam to Matlab.

1. Please visit the METR4202 Software Page:

<http://robotics.itee.uq.edu.au/~metr4202/software/index.html>

Please go to the section “Microsoft LifeCam Studio Drivers” and download the [Driver](#) and [Control Application](#).

2. Install the Drivers

3. Then install the Control Application (called “Microsoft LifeCam”)

4. Set the Flicker Compensation to 50Hz:

- Start Microsoft LifeCam
- A blue LED should light on the top of the camera
- Please expand the options window (blue arrow on the right)
- Then select settings (gear icon)
- Then select Flicker...
- Then select 50 Hz, then OK
- Close the program (the blue LED should turn off)

5. Then start MATLAB

6. Set the MATLAB Package Installation Directory to your Home Directory

- This is done via the `matlabshared.supportpkg.getSupportPackageRoot` function
- Ex:  
**`matlabshared.supportpkg.setSupportPackageRoot('H:\MATLAB2016\packages')`**
- Please test this by typing `supportPackageInstaller` and verifying the result

7. Then install the [Matlab WebCam Interface](#) via [supportPackageInstaller](#)

- This will ask you to login to Mathworks Central. You may need to create an account on Mathworks Central first if you do not already have one.
- Select USB Webcam
- Follow prompts please.

8. Test the installation:

- `camList = webcamlist`
- `cam = webcam(1)`
- `preview(cam)`
- `clear cam`