

**Gebze Institute of Technology**  
**Department of Computer Engineering**  
**BIL 665 / BIL 463**  
**(Introduction to) Computer Vision**  
**Fall 2014**  
**HW1**  
**Sep 29th 2014**

Download and install OpenCV. Installation of OpenCV might be different for different OS'es. For Ubuntu, I followed the procedures listed at <https://help.ubuntu.com/community/OpenCV> and it worked fine. For Windows and other OS, go to <http://opencv.org/>.

Compile and run some of the sample code and Tutorial code until you are comfortable with the environment.

In this homework, you will capture images from a web camera and apply thresholding methods to the live image.

Write a C++ program that will get a frame from the web cam and apply binary thresholding to the image (using OpenCV function threshold) and show it on screen and continue doing this until user enters ESC. You will get the threshold value from a track bar (use createTrackbar) function.

The OpenCV tutorial at file threshold.cpp is a good way to learn how thresholding works. There are many sample programs that shows how to capture frames from a camera.

You will demo your program after the class in the project lab. You will bring your web camera for the demo.

Zip your .cpp file and a few screen captures into a single file and submit to moodle.