## Gebze Technical University Department of Computer Engineering BIL 665 / BIL 463 (Introduction to) Computer Vision Spring 2019 HW1 Mar 7th 2019

Download and install OpenCV with the Python interface. You may use any version of OpenCV and Python.

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

In this homework, you will capture images from a web camera or system camera, find the brightest spot and the darkest spot on the images, and mark them with small circles.

Your program should do this process at least 5 times a second.

There are many sample programs that show how to capture frames from a camera.

- Do not use any available image processing functions from OpenCV. You should access each pixel one by one and make your brightness decision yourself.
- Your program should do this process at least 5 times a second.
- You will demo your program after the class. You will download your program from Moodle, then compile and run. Please bring your web camera and computer for the demo.
- YOU WILL NOT BE ALLOWED TO MODIFY YOUR PROGRAMS. YOU WILL RUN YOUR PROGRAM FROM THE JUPYTER NOTEBOOK.
- Zip your source code files and a few screen captures into a single file and submit to moodle.