

Assignment #1 Notes

Getting Started in Class

(1) Use **Cyberduck** or **Fetch** to download the following three subdirectories (subfolders) from the course directory on the CS file server to your Desktop (or **cs332** folder on your Desktop):

```
/home/cs332/download/edges  
/home/cs332/download/assign1  
/home/cs332/download/assign1images
```

(2) In MATLAB, set the Current Folder to the **assign1** folder

(3) In MATLAB, add the **edges** and **assign1images** folders to the MATLAB *search path*:

- (a) in the menu section along the top of the MATLAB desktop, click on **Set Path**
- (b) in the dialog box that appears, click on the **Add Folder...** button
- (c) in the browser window that appears, navigate to the place where you see the **edges** folder listed, select it with a click, and then click on the **Open** button
- (d) repeat steps (b) and (c) for the **assign1images** folder
- (e) close the **Set Path** window - you will be asked whether you want to save the changes for future MATLAB sessions – click on **No** (MATLAB won't actually let you save)

Finishing Up

At the end of class, upload your **assign1** folder (or entire **cs332** folder) to your personal directory on the CS file server.

Continuing your work on this assignment at a later time

In the future, you can again download the **edges** and **assign1images** folders from the course directory as described above, but download the **assign1** folder from your personal directory. Also repeat steps (2) and (3) above. If you make changes to the code files in your **assign1** folder, be sure to upload the modified files onto your personal directory.

Problem 2: Analyzing intensity changes in a two-dimensional image

```
edit yachtScript.m          % open yachtScript.m in the editor  
yachtScript;                % run the script file in the Command Window
```

Drag apart the Image Tool windows to view them separately, and use the Pixel Region tool or the zoom-in icon to view the results in more detail.

```
displayImage(zc4,8);        % display the slopes of the zero-crossings  
displayImage(zc8,16);
```

MATLAB programming tips: Terminating a program, clearing and closing

When a MATLAB program is running, the word “Busy” appears in the lower left corner of the main MATLAB window. Execution can *usually* be terminated by typing **control-C**. The following commands are also handy:

```
clear all                   % clear all variables from the Workspace  
close all                   % close all windows opened with figure or imshow  
imtool close all           % close all windows opened with imtool
```