CS4363/5363 Computer Vision
Spring 2021
Feature Extraction Exercise

1. Implement Color histograms and histograms of gradients to extract image features.

2. For each image in the dataset, extract a descriptor consisting of the concatenation of its R,G,B color histograms and the histograms of gradients of its four quadrants.

3. For each image in the dataset, find and display the most similar image (excluding itself). Measure similarity by the Euclidean distance of the images' descriptor, as explained in question 2.

Note: 50% of your grade will be assigned based on your effort during the class, evidence by submitting progress reports, asking questions, and participating in discussions. The rest will be assigned based on your submission by the deadline.