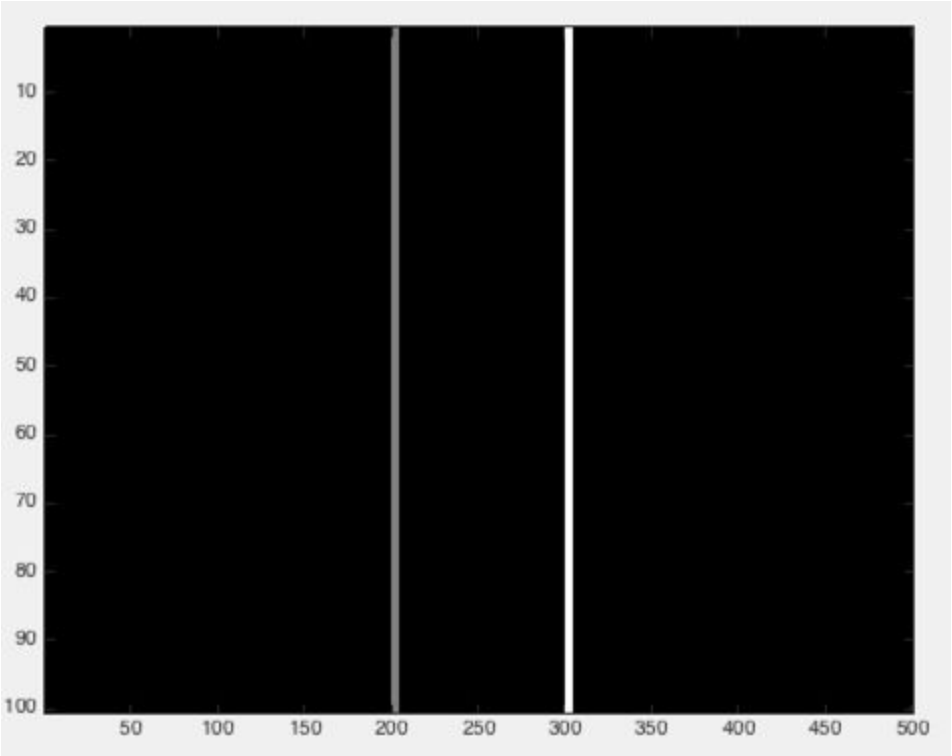
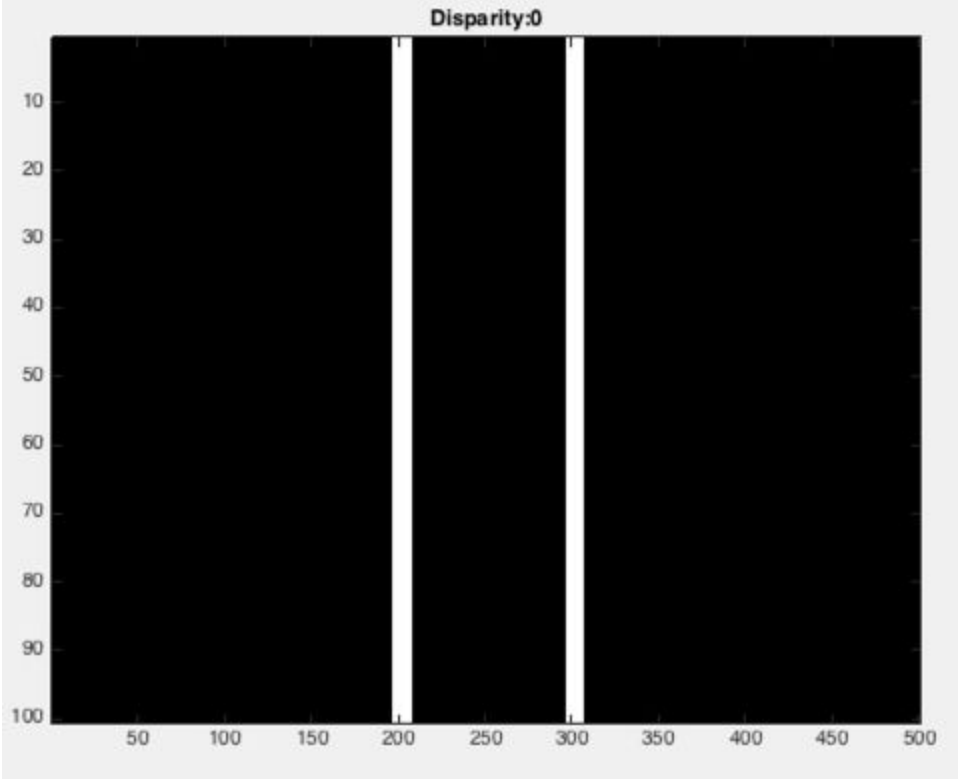
Mason DiMarco Module 6, Disparity Processing

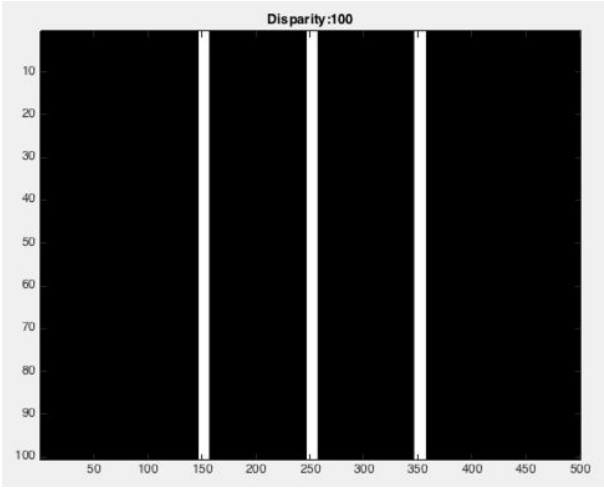
Part 2.1:

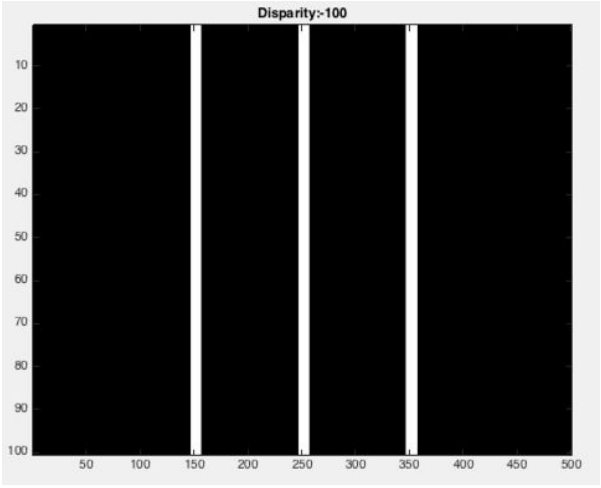
Below is the image of the strong and weak bars. The disparity would be 0 between the two images, because the left image stimulus is the same as the right image stimulus



Part 2.2

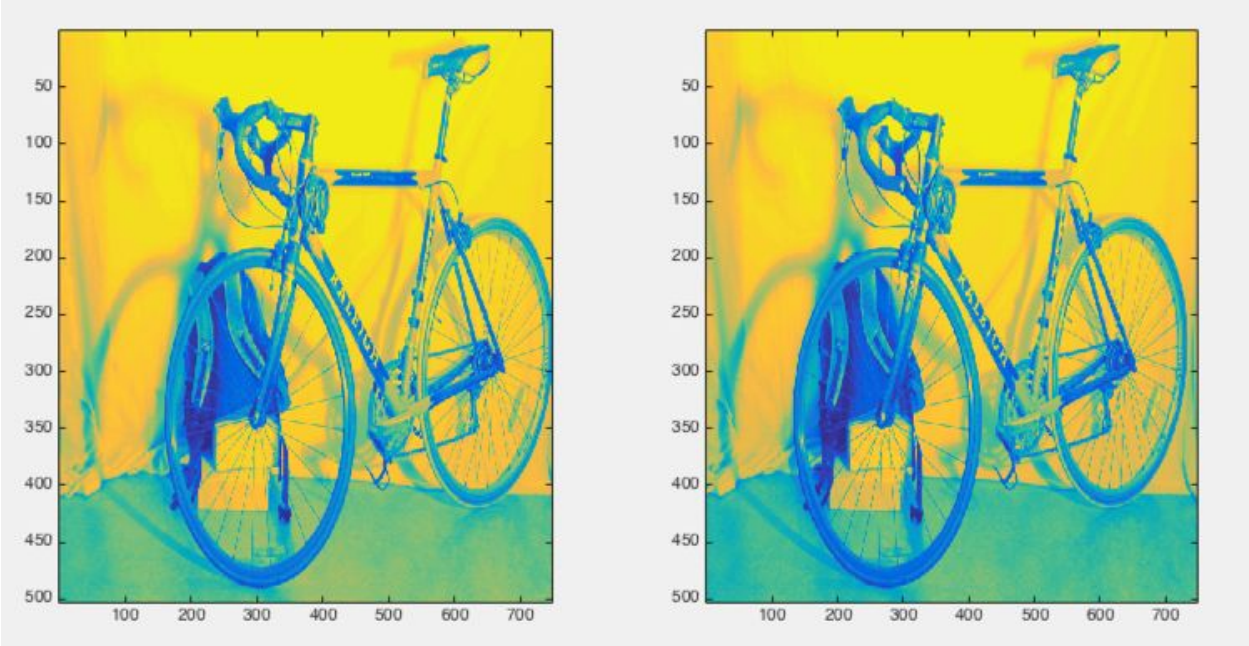






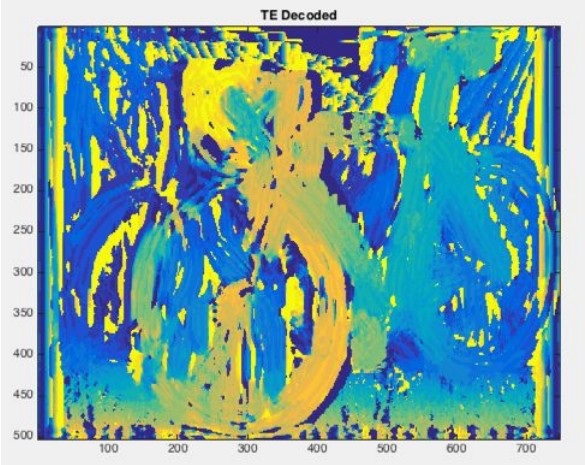
Although everything looks good for disparity 0 (because the images are the same), it's easily visible of a problem with disparity -100 and 100 (and occurs within - to + all over). The filtered images between these disparities look exactly the same, which could cause considerable confusion in our models.

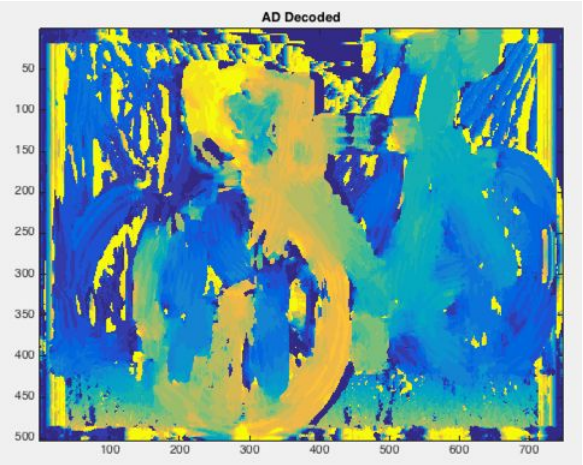
Part 2.3 - Visualization of left bike image (on the left) and right bike image (on the right)



Part 2.4 -

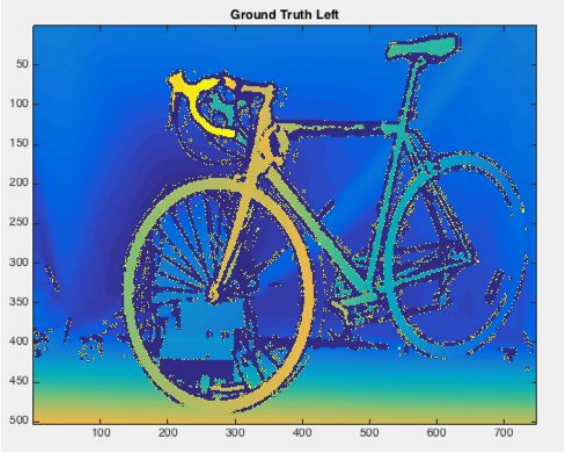
TE Decoded vs. **AD Decoded**





The AD looks quite a bit better with more gaps filled in all across the image. It's clear that the front wheel of the bike is highlighted more than the back wheel, and that the background (which should be more constant throughout) is much darker, indicating it is even farther away. Overall the AD looks to be smoother in general.

Part 3 Ground Truths



These look like much more refined versions of what we obtained from the end of part 2, with clearer defined boundaries and distinct gradients based on distance.