Peter Smith

ECE 1390

PES71

## **Problem Set #3**

- 2b) In my images the areas where one image has objects that the other does not have a high disparity that causes a skew in my images. In my images you can see shapes of the objects with the different shades, but the boundaries are not well defined.
- 3a) The images with the gaussian noise are completely unreadable. The noise made it so that my function couldn't make any clear image.
- 3b) I increased the contrast of the left image. And when I ran the function from left to right, I got a much cleaner looking version of the image. When I ran the function from right to left, the image is a little less clear, but I feel like it is still clearer than the unaltered disparity map.
- 4a) Using correlation there are much clearer boundaries as opposed to the SSD. The shapes are more defined much like the ground truth, but the color differences aren't as clear.
- 4b) The disparity map left to right with the noisy image is readable with the correlation versus the SSD version which was completely unreadable, but for the right to left it is still unreadable. There are some shapes that can be made out, but not enough to have a clean image. Compared to the ground truth, you can see where there are similarities in the shapes of objects, but it is hard to make out any real disparities between them. With the correlation of the high contrast images you can see the disparity maps are slightly clearer than the images with without the contrast adjustment. Compared to the ground truth there are still similar shapes but the color variances aren't strong.