Joe Morrissey (jrm15)
CS 445 - Project 3: Gradient Domain Fusion

Complete the claimed points and sections below.

Total Points Claimed	**[82] / 160**
Core	
1. Toy Problem	[20] / 20
2. Poisson blending	[45] / 50
3. Mixed gradients	[10] / 20
4. Quality of results / report	[7] / 10
B&W	
5. Color2Gray	[ ] / 20
6. Laplacian Pyramid Blending	[ ] / 20
7. More gradient domain processing	[ ] / 20

1. Toy problem

```
Max error is:  7.284309720184678e-05
```

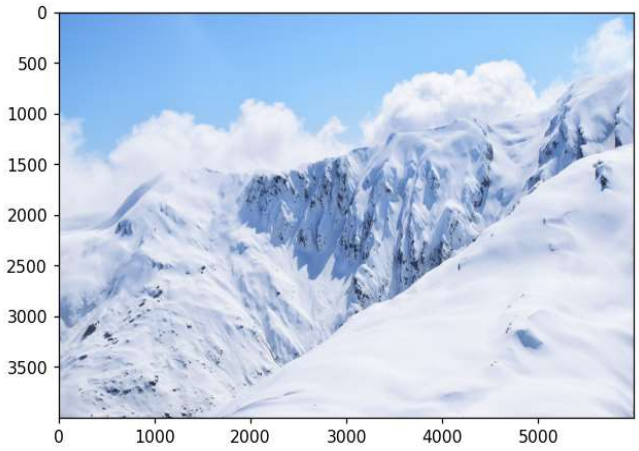
2. Poisson blending

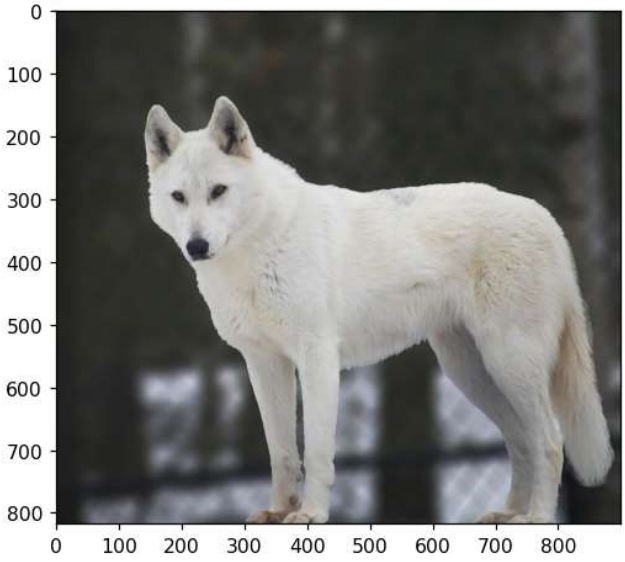
Using your own images (not sample images), include:

- Your favorite blending result, including: (1) background and object images; (2) pasted image with source pixels directly copied onto target background region (can use `utils.get_combined_img`); (3) final blend result. (30 pts)
- At least one more good result (10 pts)
- At least one failure case, where the result is bad. Explain why it doesn't work. (10 pts)

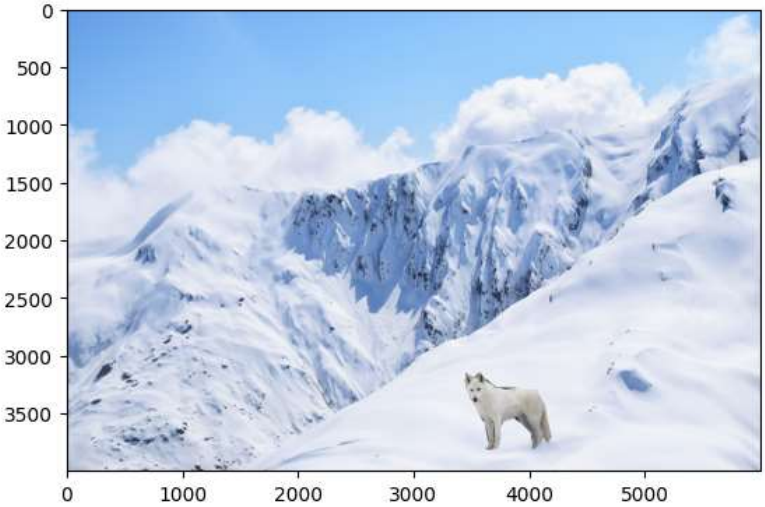
<u>Good Result</u>

Input Images

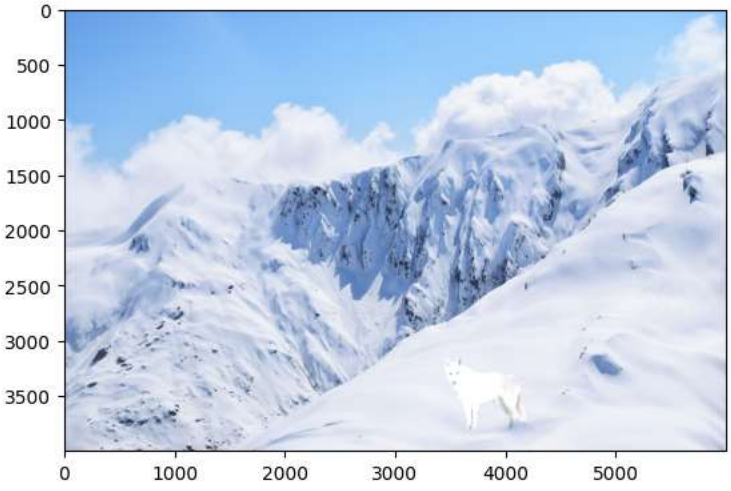




Combined Image

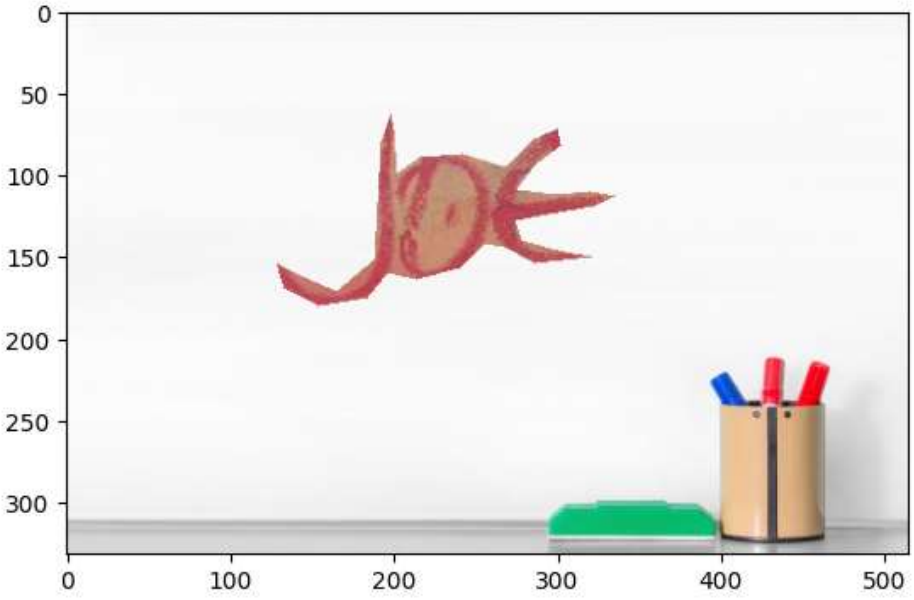


Final Result

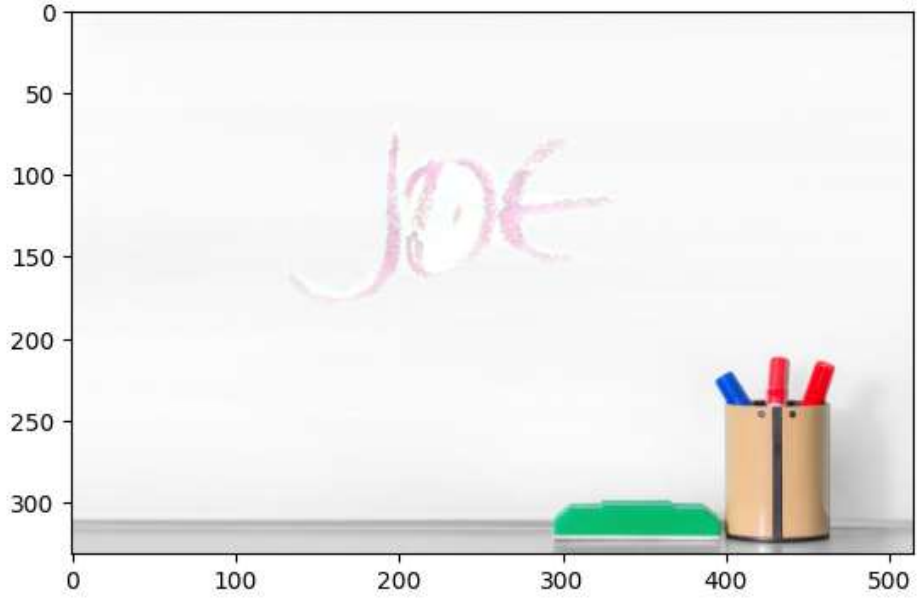


Other Result

Input Images:



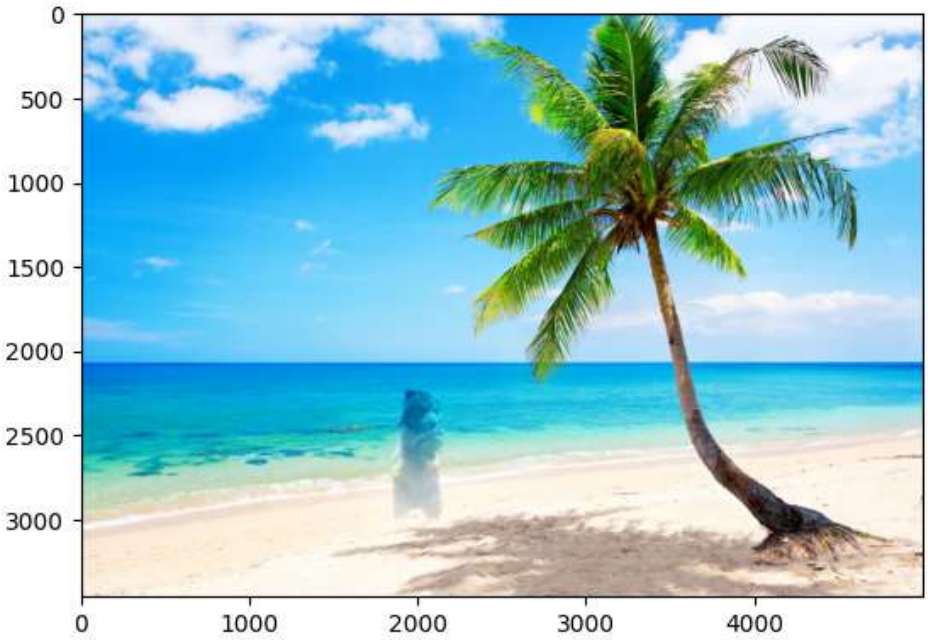
Result



Bad Result

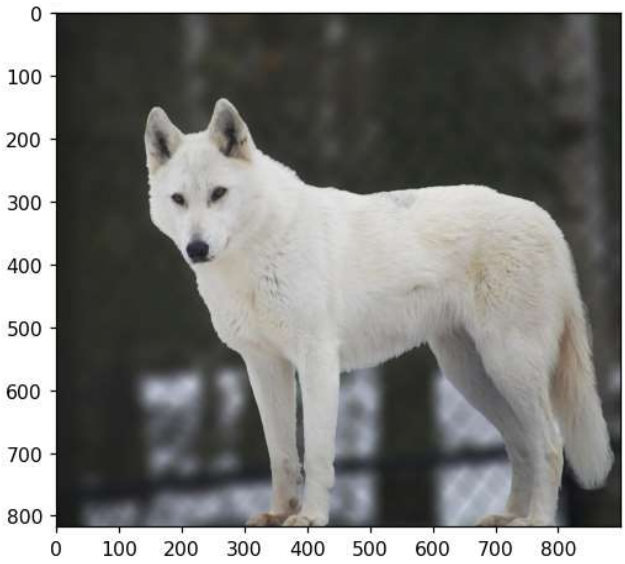
Two input images:

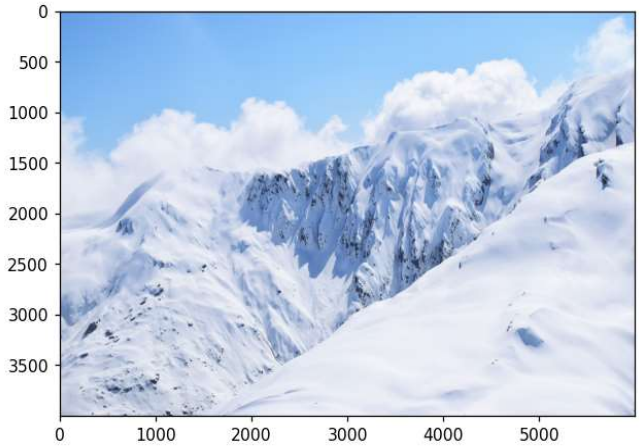
Result:

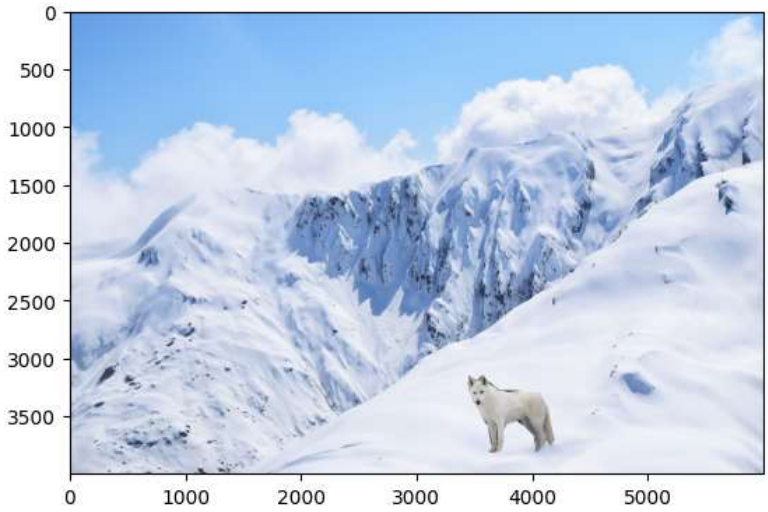


Gradient domain processing preserves the shape/gradient of the object but not the color. In this example, the bear's fur was not similar enough to the background. This resulted in the noticeable color shift in the bear's fur, although the bear's shape was preserved.

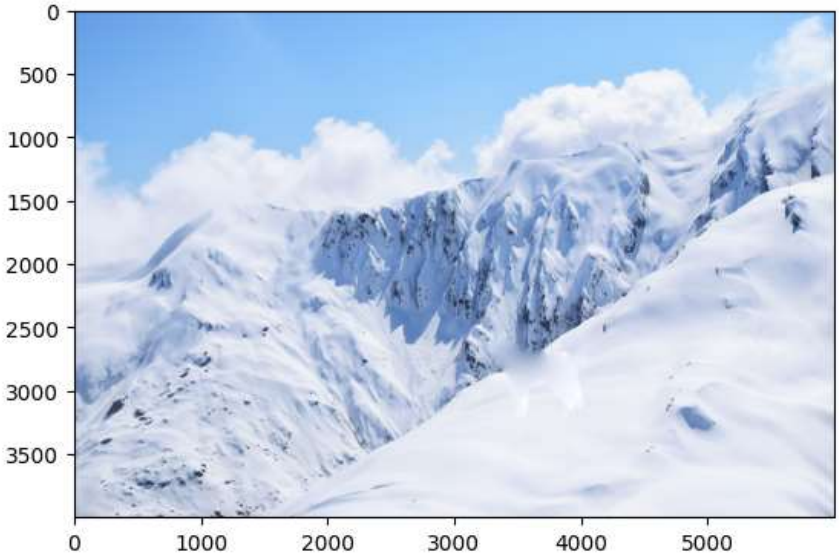
3. Mixed gradients







Mixed Gradient Result:



4. Quality of results / report

Nothing extra to include (scoring: 0=poor 5=average 10=great).

Acknowledgments / Attribution

List any sources for code or images from outside sources

Beach Picture
bear - Bing
snow mountain - Bing images
white wolf - Bing
joe was here - Bing images
white board close up - Bing