

University at Buffalo
Department of Computer Science and Engineering
CSE 473/573 - Computer Vision and Image Processing

Spring 2023

Project #2 Grading Rules

1 Background Stitching (50pts)

- To get full points, both persons (as foregrounds) should be removed from the overlap region (Figure 1).
- If you remove the foregrounds but clip out some region (Figure 2), you will lose 10 points.
- If you fail to remove foreground (Figure 3), you will lose 20 points.



Figure 1: Example of background stitching.



Figure 2: Clipping will lose 10 points. You should do padding on the target image before warping the source image to avoid clipping.



Figure 3: Failing to remove foreground will lose 20 points.

2 Image Panorama (50pts)

- Save a 4×4 one-hot array $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$ in the JSON file. (20 points)
- Conduct image transformation and stitch all into one panoramic photo, showed as Figure 4. (30 points)



Figure 4: Example of image panoramas.

3 Image Panorama Example (10pts Bonus)

Define your image such as 't3_1.png', 't3_2.png' and save a reasonable output as panorama image.