

# Supplementary Material for Parallax-tolerant Image Stitching

Fan Zhang and Feng Liu  
Department of Computer Science  
Portland State University  
{zhangfan, fliu}@cs.pdx.edu

## 1. Representative stitching results

We experimented with our stitching method on some challenging images with large parallax. We also compared our method to the state-of-the-art methods, including Photoshop, AutoStitch, as-projective-as-possible stitching (APAP) [2], and our implementation of seam-driven stitching (SEAM) [1]. For APAP, we used the code shared by the authors. Since that code only aligns images, we applied the same seam-cutting and multi-band blending algorithm used in our method to the APAP alignment results and produced the final stitching results for APAP. We show these results in Page 2- 6 (Figure 1 to 10). In each figure, **we use red circles to indicate the artifacts in the stitching results, and use green circles to show the corresponding region in the input images.**

## 2. Stitching results of the APAP image set

We also tested our method on the images used in the recent as-projective-as-possible stitching (APAP) paper [2]. Our test shows that our method works well on all these images. We show our stitching results in Page 7-13 (Figure 11 to 17).

## Acknowledgement

Input images in Figure 8 are used with written permission from Flickr user Viktor Nezhelskiy. Input images in Figure 9 are used under a Creative Commons Attribution License from Youtube user Lars Troen.

## References

- [1] J. Gao, Y. Li, T.-J. Chin, and M. S. Brown. Seam-driven image stitching. In *Eurographics 2013-Short Papers*, pages 45–48. The Eurographics Association, 2013. 1
- [2] J. Zaragoza, T.-J. Chin, M. Brown, and D. Suter. As-projective-as-possible image stitching with moving dlt. In *Computer Vision and Pattern Recognition (CVPR), 2013 IEEE Conference on*, pages 2339–2346, June 2013. 1



(a) Input images



(b) Photoshop



(c) Autostitch



(d) APAP



(e) SEAM



(f) Ours

Figure 1: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



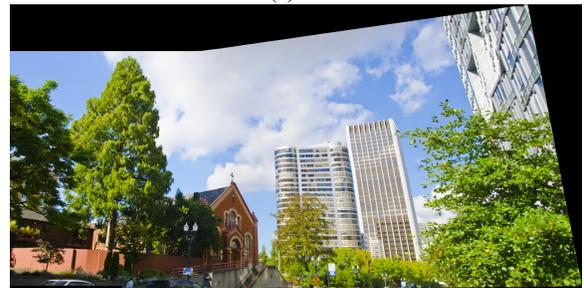
(c) Autostitch



(d) APAP



(e) SEAM

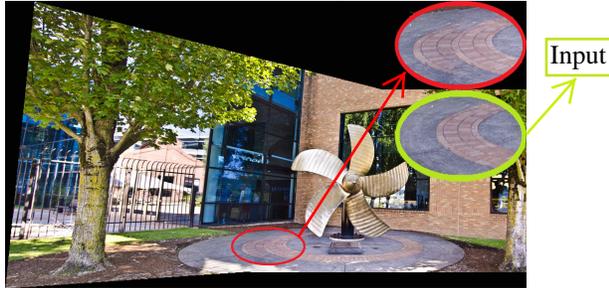


(f) Ours

Figure 2: Comparisons among various stitching methods.



(a) Input images



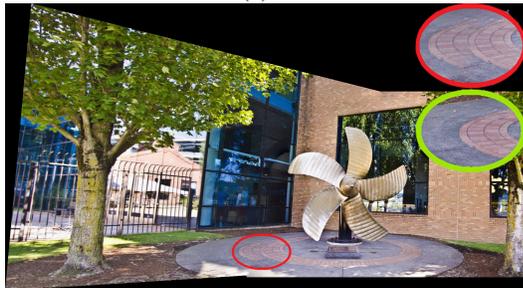
(b) Photoshop



(c) Autostitch



(d) APAP



(e) SEAM



(f) Ours

Figure 3: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



(c) Autostitch



(d) APAP

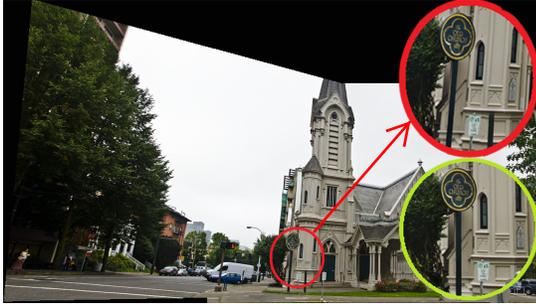


(e) Ours

Figure 4: Comparisons among various stitching methods.



(a) Input images



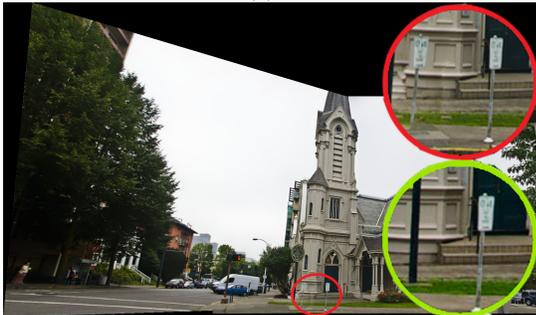
(b) Photoshop



(c) Autostitch



(d) APAP



(e) SEAM

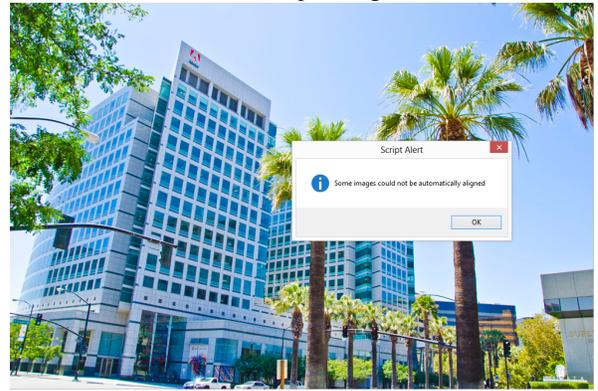


(f) Ours

Figure 5: Comparisons among various stitching methods.



(a) Input images



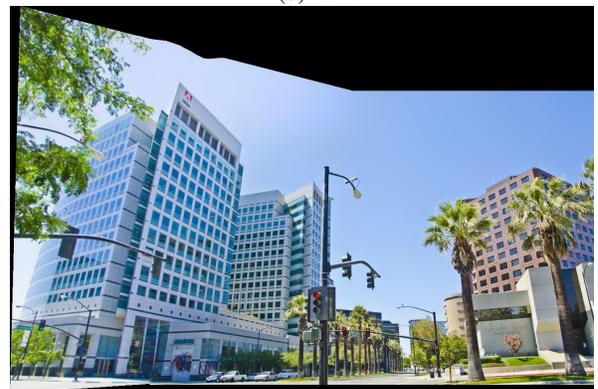
(b) Photoshop



(c) Autostitch



(d) APAP



(e) Ours

Figure 6: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



(c) Autostitch



(d) APAP



(e) Ours

Figure 7: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



(c) Autostitch



(d) SEAM



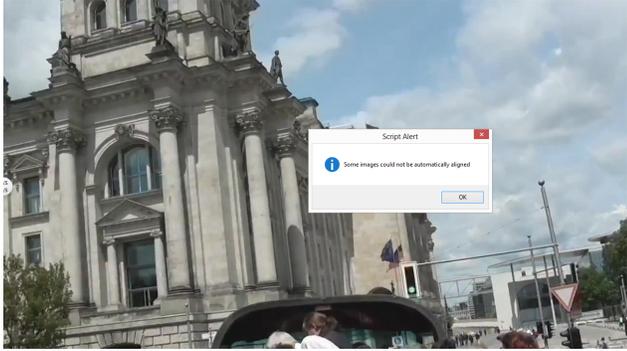
(e) Ours

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Figure 8: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



(c) Autostitch



(d) APAP



(e) SEAM



(f) Ours

Figure 9: Comparisons among various stitching methods.



(a) Input images



(b) Photoshop



(c) Autostitch



(d) APAP



(d) SEAM



(e) Ours

Figure 10: Comparisons among various stitching methods.

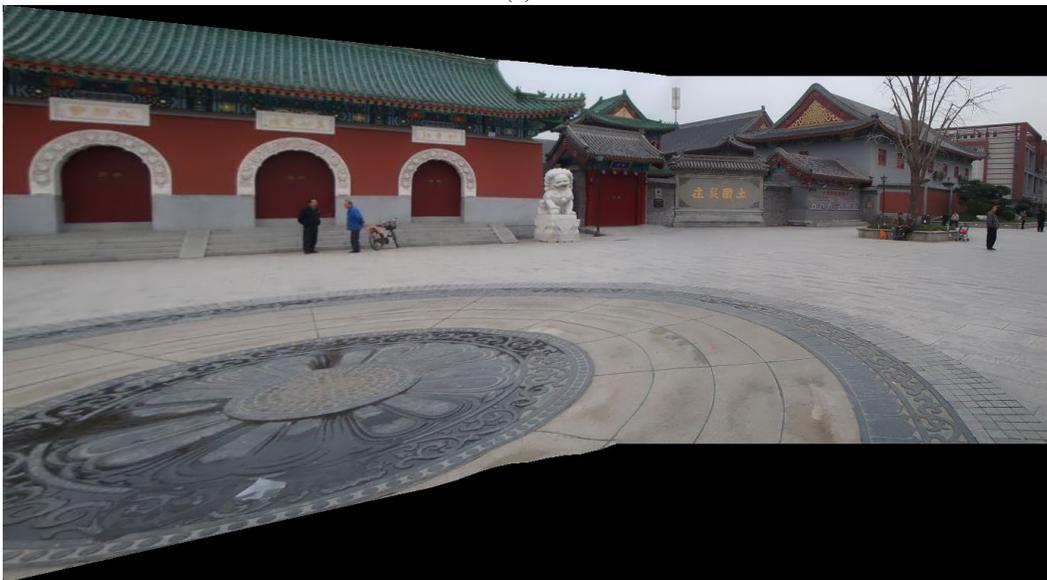
# Stitching results of the APAP image set



(a) Input images



(b) APAP



(c) Ours

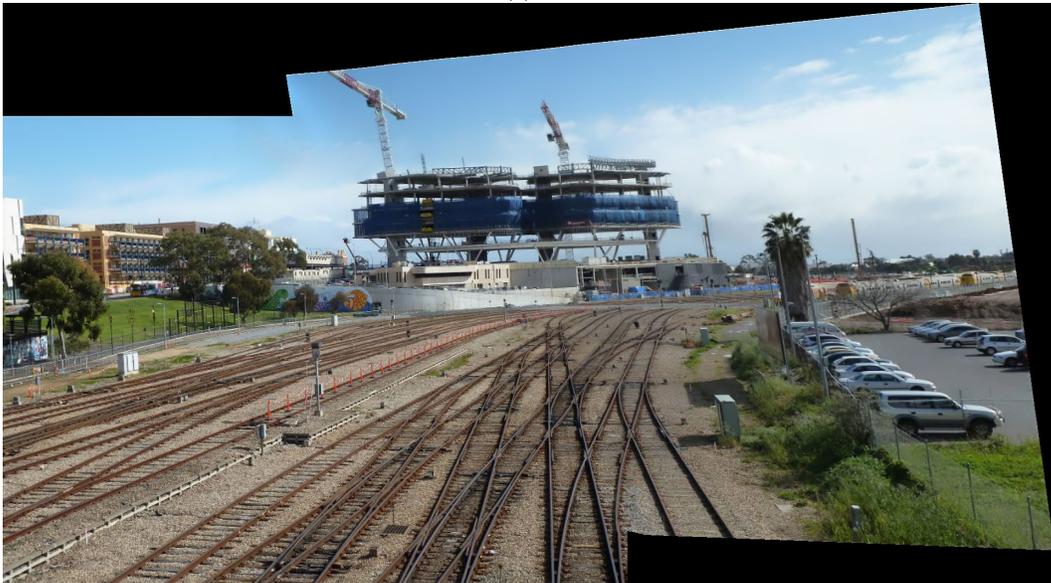
Figure 11: Our result for the APAP image set (Example 1).



(a) Input images



(b) APAP



(c) Ours

Figure 12: Our result for the APAP image set (Example 2).



(a) Input images



(b) APAP



(c) Ours

Figure 13: Our result for the APAP image set (Example 3).



(a) Input images



(b) APAP



(c) Ours

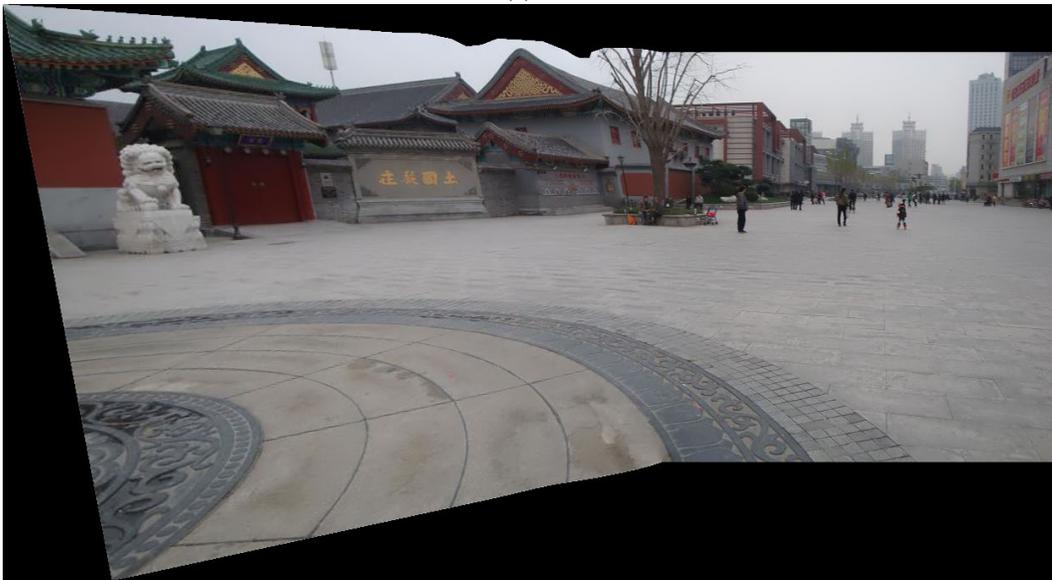
Figure 14: Our result for the APAP image set (Example 4).



(a) Input images



(b) APAP

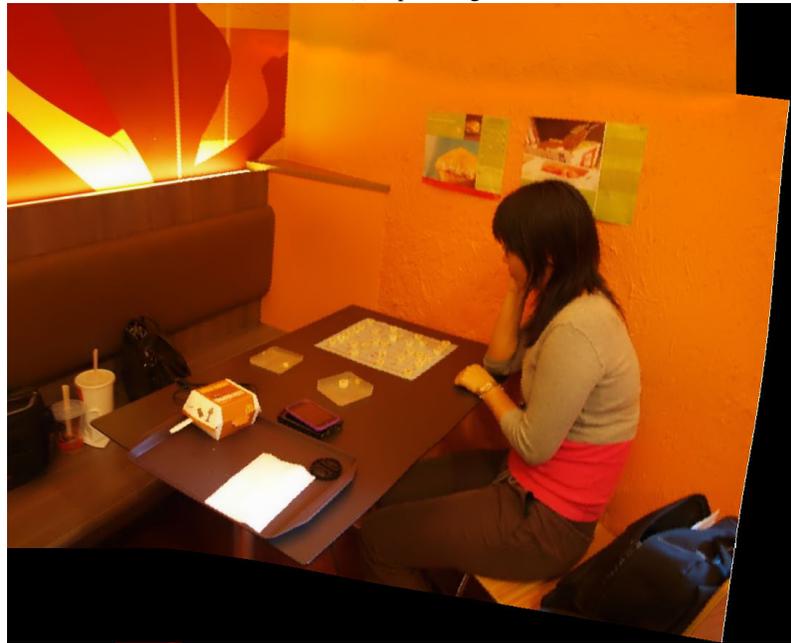


(c) Ours

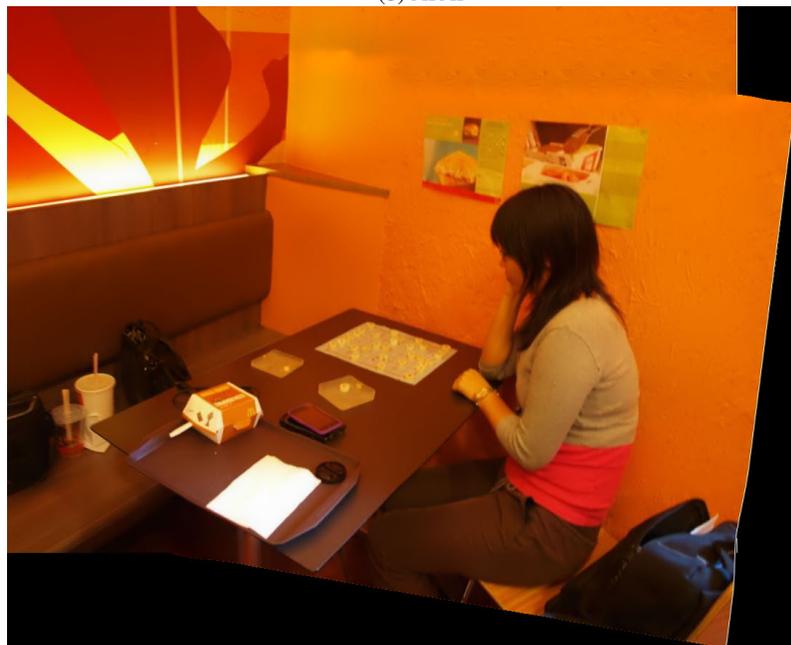
Figure 15: Our result for the APAP image set (Example 5).



(a) Input images



(b) APAP

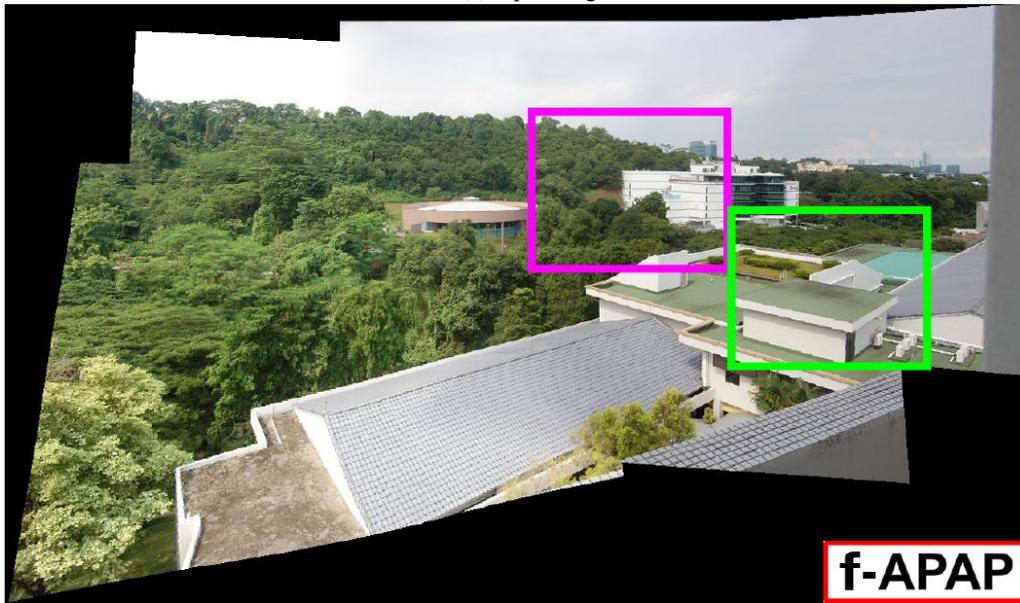


(c) Ours

Figure 16: Our result for the APAP image set (Example 6).



(a) Input images



(b) APAP (Copied from the APAP supplementary material)



(c) Ours

Figure 17: Our result for the APAP image set (Example 7).