# CSC320 A3 Report

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1.

The pair (Source1, Mask1) represents a good case for inpainting. As you can see from the `Source1.inpainted.png`, there is no obvious visible difference in the target area. The target area perfectly joints with neighbour patches. In the `Source1.jpg`, there are many similar patches that can be filled in the target region, which also will not result in obvious difference in the target area. The textures near the target area also have strong linear properties. So, this algorithm can precisely represent the similar textures in the target area. Besides, there is no strong 3d effect in the image.

2.

The pair (Source2, Mask2) represents a bad case for inpainting. As in the `Source2.inpainted.png`, the joint of target areas are obviously different with neighbour patches. We can easily find out which parts are the result of inpainting processing. The reason is that in the `Source2.jpg`, there is even no good enough similar patches in other areas that can be properly filled in the target area. Although, there is strong linear proterties of the texture, the target area belongs to a zone that has a strong 3d effect, which is this algorithm can hardly handle.
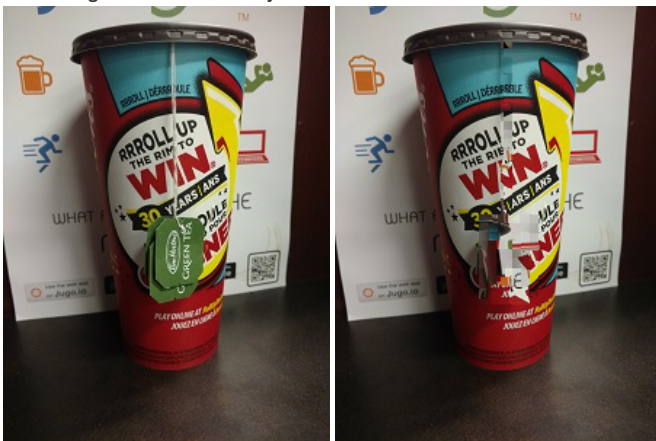
3.

The blue marked zone shows obvious difference with neighbour pixels. Even though the target patch represent the edge of shadows well, because of the light path and 3d effect in this area, the shadow should be unique in the target area. So, we cannot repainting it using other patches. For the red marked zone, it shows a chaos. This may be because there is no proper patch that can be filled in this area. Especially at the beginning of the processing, low similarity patches were filled in the target area which would lead to further chaos.