

5. Ablation Study

We found that the concatenation of the flipped UV map to the input more increased the accuracy. In particular, it helped to fill the incomplete UV where some regions of both half-sides have the hole correspondingly. However, either utilizing the mask in the GAN training or attaching the flipped mask into the input decreased the completion performance, resulting in the flipped holes on the constructed UV from the generator. Differently to some other completion methods [DCX*18, YLY*19], the feature or perception loss, which is defined as the reconstruction loss on features of pre-trained network layers, was not employed as the discrimination on the aligned UV-space and the skip-connection of the generator helped the generator to complete the hole in fine detail.



Figure 5: More comparisons of UV completion results on the Multi-PIE UV dataset.

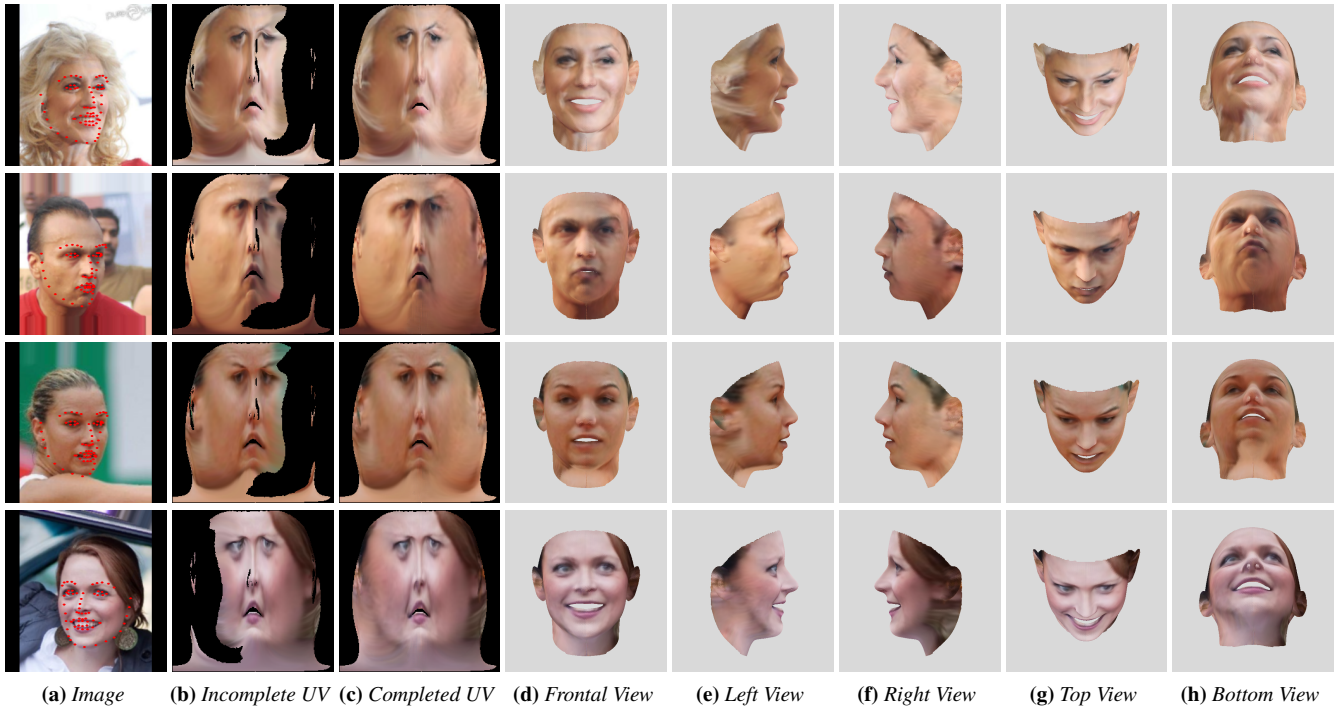


Figure 6: More results of qualitative results on the CelebA dataset. Best viewed in zoom-in.