

Supplementary Materials

Towards Automatic Image Editing: Learning to See another You

BMVC 2016 Submission # 306

In Figure 1 we present an extension of Figure 6 of the main paper. Here we show the per-pixel MSE varying the pose in the source image (vertical axis) and in the target image (horizontal axis). Notice how the highest pixel errors come from the silhouette of the face, hair and neck regions since these are the regions with more uncertainty and it is difficult to infer that from single image. Figure 2 is an extension of Figure 3 of the main paper. Here we show additional examples of generation of faces in different poses. Our approach is able to maintain the identity of the generated faces as well as facial details like glasses or beard. Figure 3 is an extension of Figure 5 (right) of the main paper. The task correspond to retrieve a query image with a different pose. Here we show the top 5 retrieved faces for some additional query examples. Figure 4 is an extension of Figure 8 of the main paper. In this figure we show additional examples of image inpainting: the algorithm has to reconstruct in a realistic way the part of the face that is occluded by the black box.

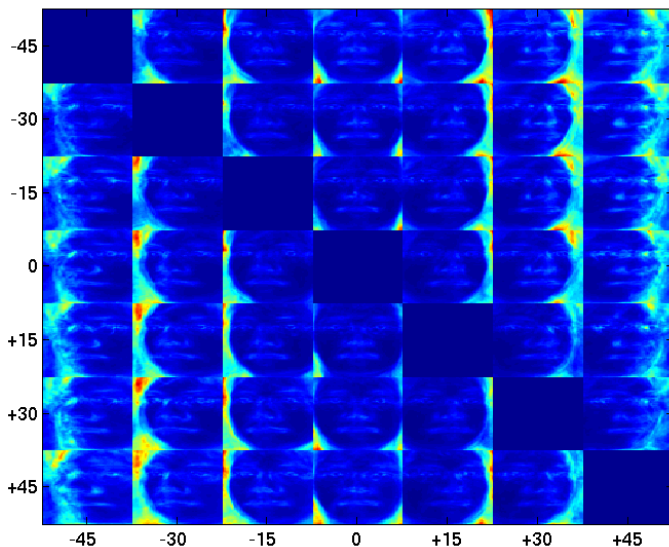


Figure 1: Visualization of per-pixel MSE for various pose changes. The vertical axis is source pose degree and the horizontal is target pose degree.

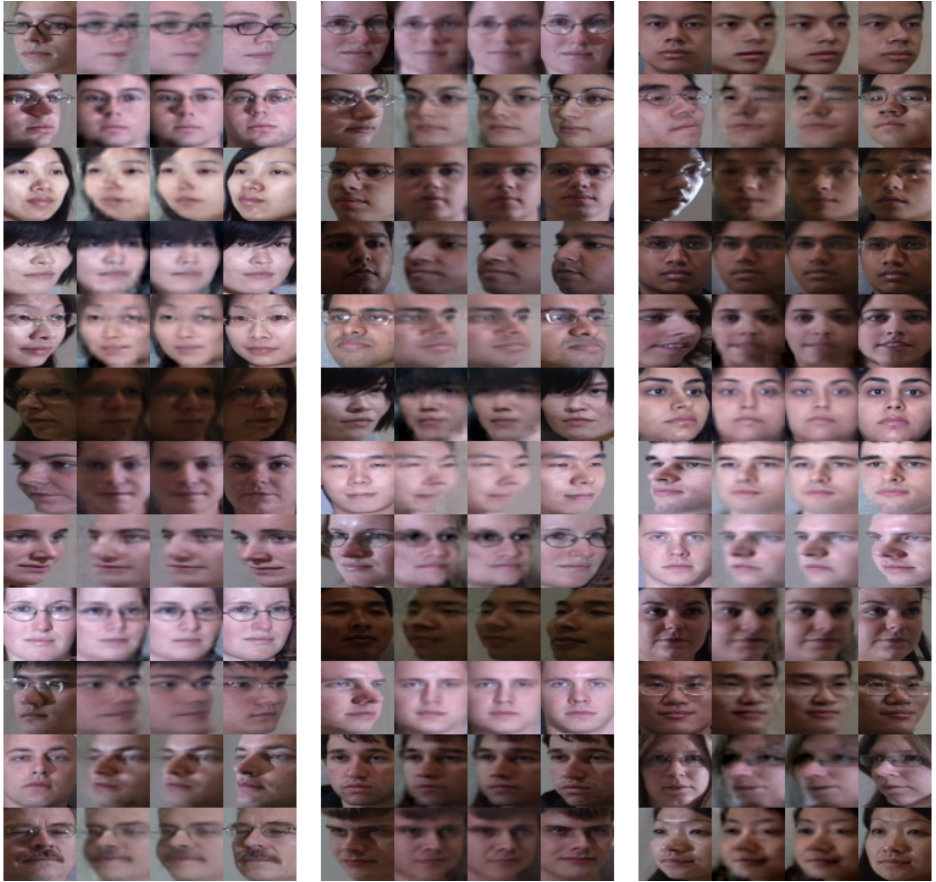


Figure 2: Qualitative results of our image generation from test data of MultiPIE. In each row, first column is input image, last column is ground-truth target image, 2nd column is the output of first stage and 3rd column is the image generated from the second stage network.

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Figure 3: Visual retrieval results using our method. The first column is the query image, the second is the generated image using our method and the remaining columns are the top 5 retrieval results. The green boxes are correct retrieved faces. A retrieved image is considered to be correct if its identity, pose and illumination are all correct.

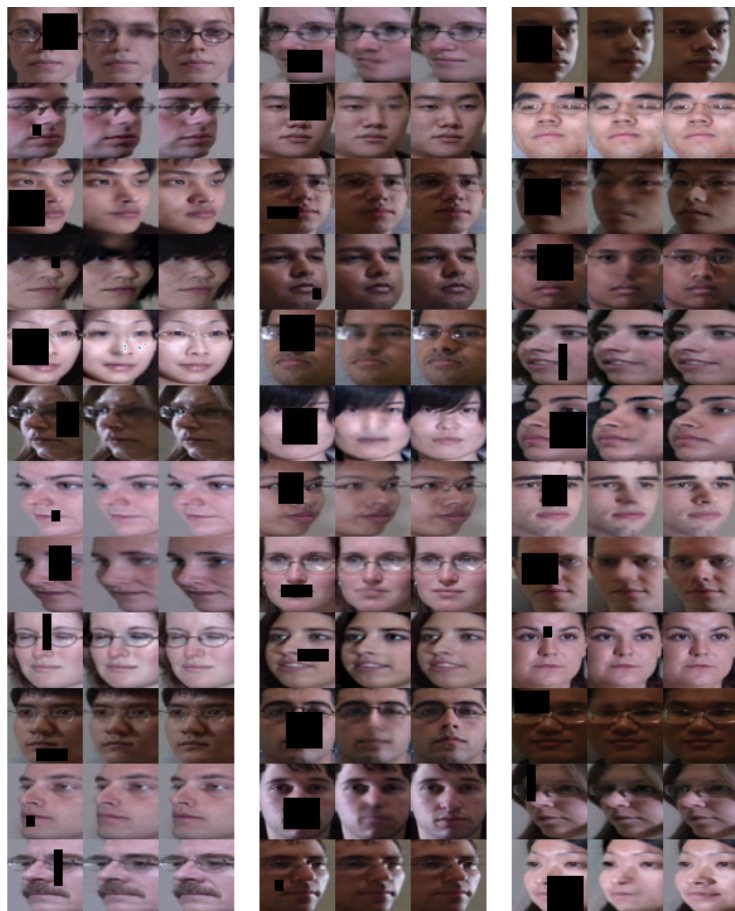


Figure 4: Qualitative results for the task of image inpainting. The first column shows the input image, the second column shows images generated with our method and the third column shows the complete image without the occluding pattern.

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