Assessing Eye Aesthetics for Automatic Multi-Reference Eye In-Painting -Supplementary File

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1. Introduction

In this supplementary file, we mainly demonstrate two parts: the more eye in-painting results compared with ExGAN [1], and more results of challenge cases compared with ExGAN [1].

2. Eye In-painting Results

In this section, we show more eye in-painting results compared with ExGAN [1], which is the state-of-the-art eye in-painting approach. As shown in Figure 1, our approach can generate more realistic and natural eyes than ExGAN.

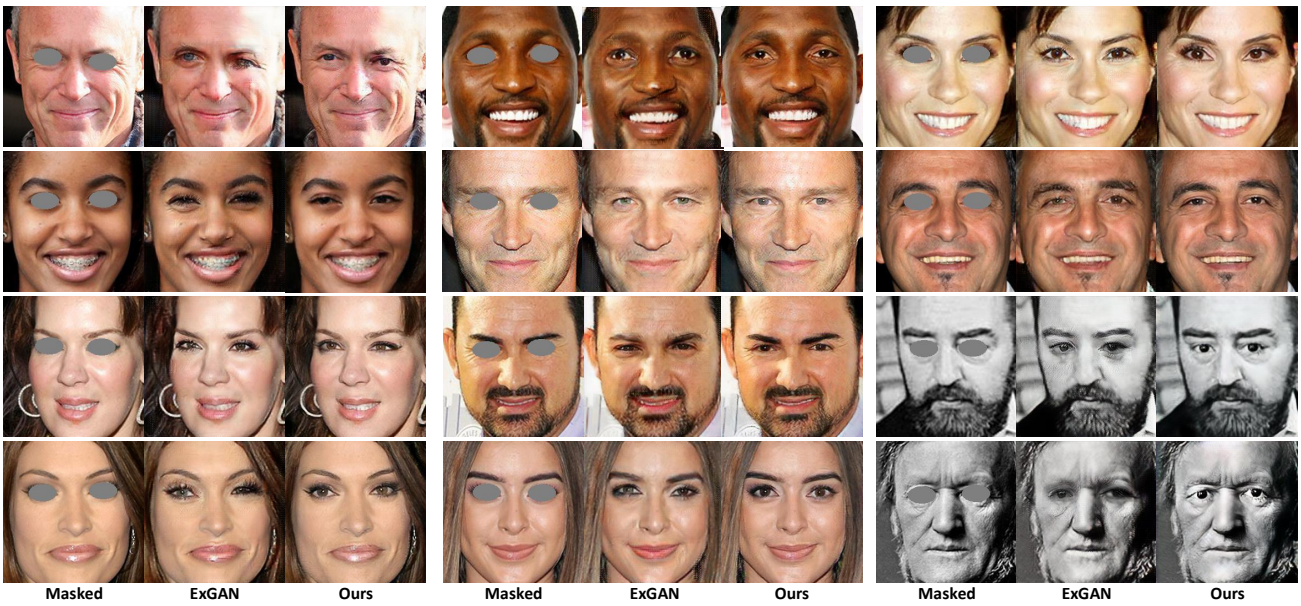

Figure 1. Eye in-painting results. The first column of each part is the input image with masks; the second column is the in-painting result of ExGAN [1]; and the last column is our AesGAN result.

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3. Challenge Cases

In this section, we show some results of challenge cases compared with ExGAN [1]. It is mentioned in [1] that ExGAN can not deal well with occluded eyes and some iris colors of the new eyes may be inconsistent with the original image. As shown in Figure 2, AesGAN with parsing constraint and eye assessment constraint can address these limitations well.

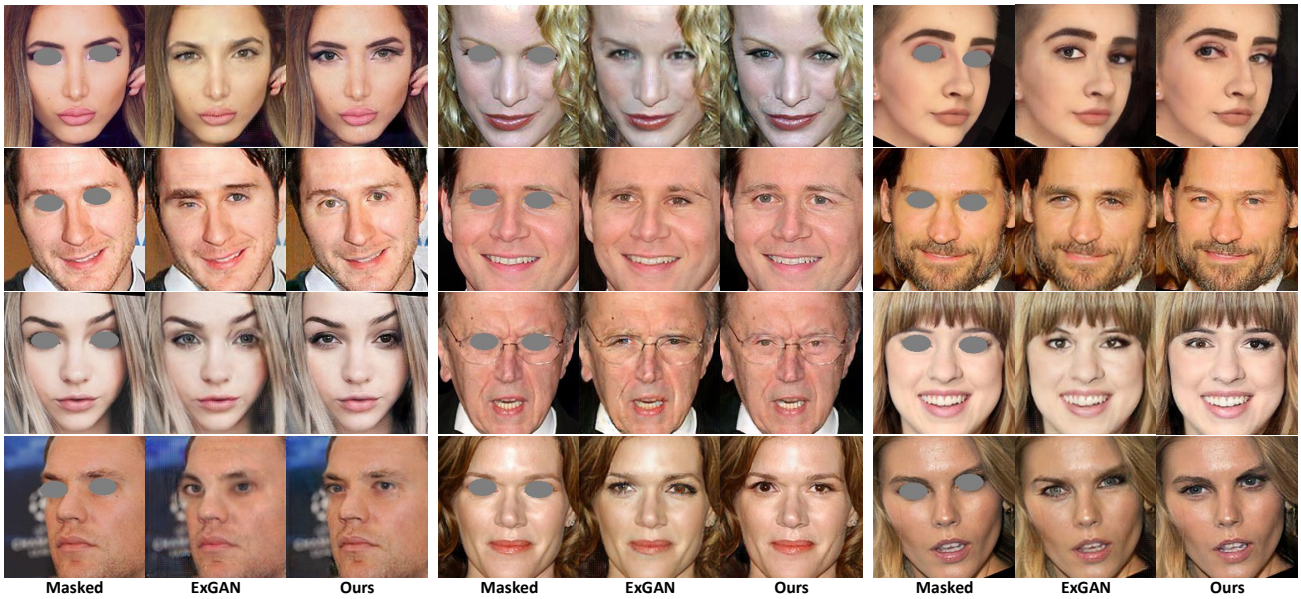

Figure 2. More in-painting results of challenge cases, such as occluded eyes, side faces, the color changes of the faces and so on. The first column of each part is the input image with masks; the second column is the in-painting result of ExGAN [1]; and the last column is our AesGAN result.

References

[1] Brian Dolhansky and Cristian Canton Ferrer. Eye in-painting with exemplar generative adversarial networks. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*, pages 7902–7911, 2018.