

Artistic Glyph Image Synthesis via One-Stage Few-Shot Learning

YUE GAO¹, Wangxuan Institute of Computer Technology, Peking University, China

YUAN GUO¹, Wangxuan Institute of Computer Technology, Peking University, China

ZHOUHUI LIAN², Wangxuan Institute of Computer Technology, Peking University, China

YINGMIN TANG, Wangxuan Institute of Computer Technology, Peking University, China

JIANGUO XIAO, Wangxuan Institute of Computer Technology, Peking University, China

1 Introduction

In this supplementary material, we provide some additional results to support our paper.

2 Parameter Studies

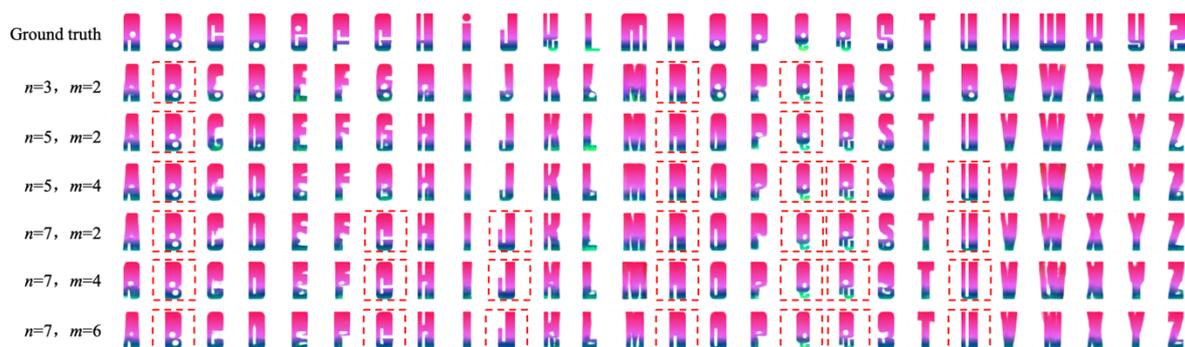


Fig. 1. Visual comparison of our models with different few-shot size n and style input size m on the English glyph dataset. Characters in the few-shot reference set are marked in red boxes.



Fig. 2. Visual comparison of our models with different few-shot size n and style input size m on the Chinese glyph dataset.



Fig. 3. Visual comparison of our models with different few-shot size n on the Chinese glyph dataset, the style input size is fixed to 4.

¹ Denotes equal contribution

² Corresponding author

3 Ablation Studies

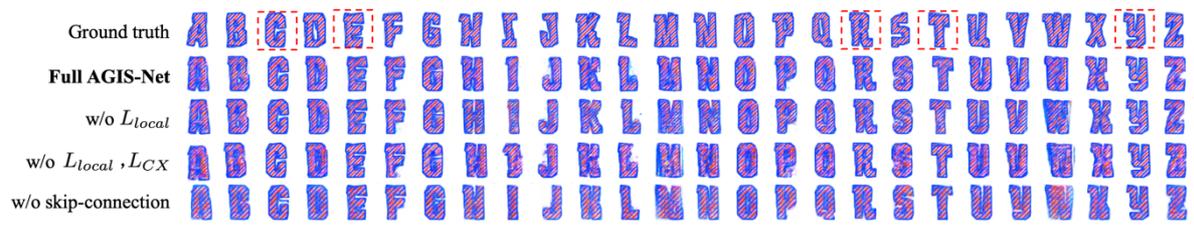


Fig. 4. Ablation studies for the proposed AGIS-Net, w/o denotes without.



Fig. 5. Ablation studies for the proposed AGIS-Net, w/o denotes without.

4 Comparison with the State of the Art



(a)



(b)



(c)



(d)



(e)

Fig. 6. Visual comparison of synthesized glyph images for some English artist-designed fonts, obtained by our AGIS-Net, MC-GAN [Azadi et al. 2018], TET-GAN [Yang et al. 2019], MS-Pix2Pix [Mao et al. 2019] and BicycleGAN [Zhu et al. 2017b], respectively.

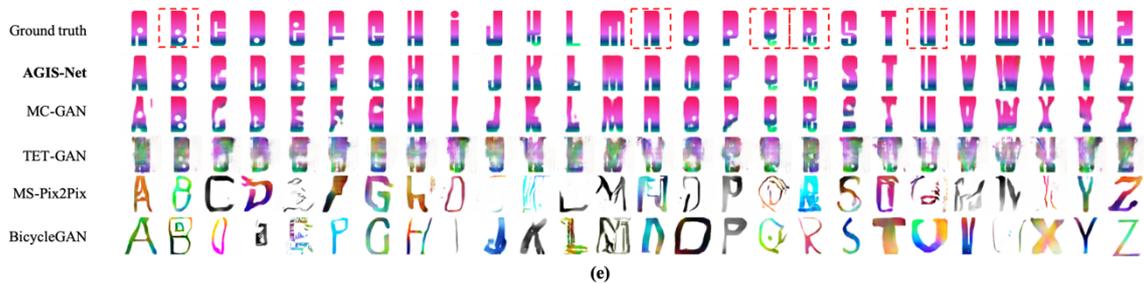
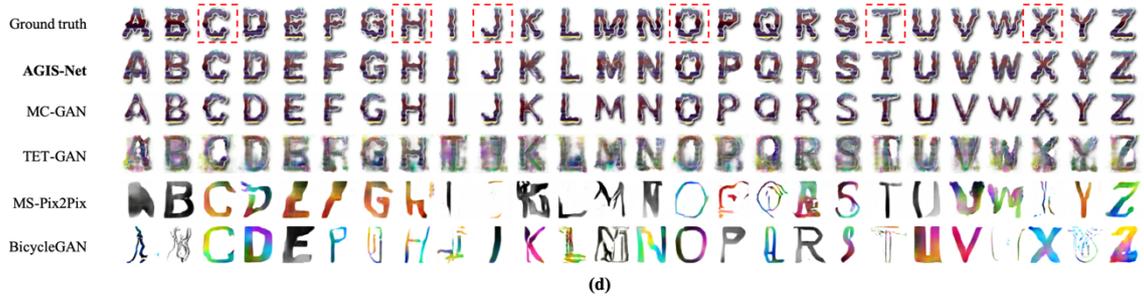
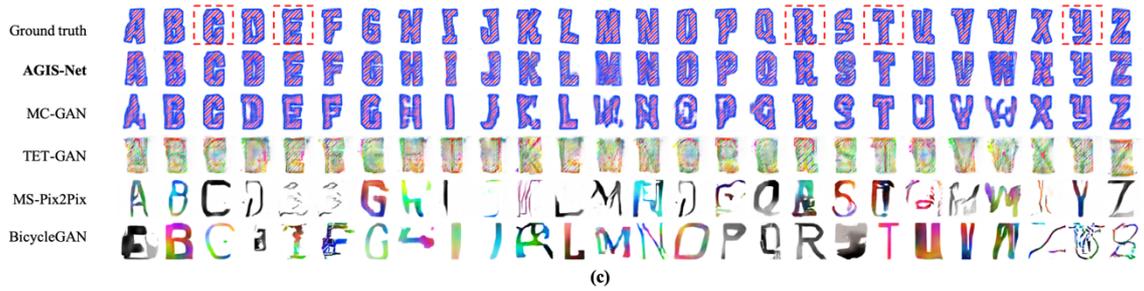
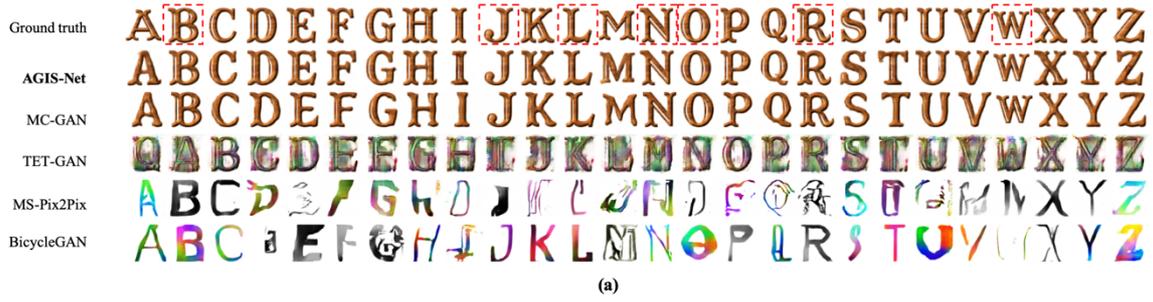


Fig. 7. Visual comparison of synthesized glyph images for some English artist-designed fonts, obtained by our AGIS-Net, MC-GAN [Azadi et al. 2018], TET-GAN [Yang et al. 2019], MS-Pix2Pix [Mao et al. 2019] and BicycleGAN [Zhu et al. 2017b], respectively.

5 Application on Chinese glyphs



Fig.8. Visual comparison of synthesized glyph images for some Chinese artist-designed fonts, generated by our AGIS-Net and TET-GAN [Yang et al. 2019], respectively.

6 Generalization Ability



Fig. 9. Glyph images of English lowercase characters synthesized by AGIS-Net. The first row shows the content input for lowercase characters.



Fig. 10. Glyph image synthesis for Japanese and Korean characters. The first row shows the content input images, and the leftmost two columns give an overview of the styles.