A. Supplement

A.1. Applying on Real Images

We apply our method and baseline image matting methods on more real images and compare their qualitative results. Figure 1 and Figure 2 present their text matting performance on real English posters. Figure 3 and Figure 4 present their text matting performance on real Chinese posters. These four figures clearly demonstrate the superiority of our method over previous image matting methods on the task of text matting. In addition, compared with SHM [1], our method is better at focusing on the interested text regions. This indicates the effectiveness of the attentional text region detector in our method.

A.2. Visualization of Our Method

We visualize the intermediate results of our method in Figure 5 to help readers understand our method well. The first column is the original input image. The second column is the detection result from the attentional text region detector. Afterwards, each detected region is sent to T-Net to get the trimap prediction shown in the third column. Then, each detected region and trimap prediction are sent to M-Net to get the matte prediction for the detected region. Finally, the post-processing module filters out false detected regions based on matte predictions. The last column presents the final matte prediction of our method.

A.3. Poster Generation

As we mentioned in the paper, we build a simple poster generation system. This system accepts a new input movie background and the extracted movie title as its inputs. And it randomly chooses a paste position from the position set $P$ [top-left, top-middle, top-right, middle, bottom-left, bottom-middle, bottom-right]. Finally, based on the paste position, the poster generation system re-composites the new input movie background with the extracted movie title to obtain a new creative poster.

Figure 6, 7, 8, and 9 demonstrate the English and Chinese poster generation performance. More specifically, the first column is the original posters, we utilize our text matting method to extract the movie titles from these posters. The extracted movie titles are shown in the second column. The third column shows the new input movie backgrounds. And the last column presents the new generated creative posters from our poster generation system. As shown in the last column, our poster generation system is able to generate high-quality posters.

References

Figure 1. The qualitative results of our method and baseline matting methods with the generated trimap from attentional text region detector and T-Net on real English posters
Figure 2. More qualitative results of our method and baseline matting methods with the generated trimap from attentional text region detector and T-Net on real English posters
Figure 3. The qualitative results of our method and baseline matting methods with the generated trimap from attentional text region detector and T-Net on real Chinese posters
Figure 4. More qualitative results of our method and baseline matting methods with the generated trimap from attentional text region detector and T-Net on real Chinese posters.
Figure 5. Intermediate Visualization of Our Method
Figure 6. English Poster Generation
Figure 7. More English Poster Generation
Figure 8. Chinese Poster Generation
Figure 9. More Chinese Poster Generation