Supplementary for "Document Image Shadow Removal Guided by Color-Aware Background"

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Abstract

The supplementary material provides more visualization comparison to support the main paper.

1. Discussion and Experiments

Figure 1 provides some visual shadow removal results to further demonstrate the superiority of our method. Compared with these methods, our BGShadowNet can effectively recover illumination in shadow regions, and our results are closer to the ground-truth images.

Figure 2 and Figure 3 present some other shadow removal results for document images. From these results, we can observe that, our method effectively removes shadows in the image, and the recovered illumination and color in shadow regions are consistent with surrounding environment.

Moreover, Figure 4 gives some shadow removal results for images with text information acquiring from our daily life. It can be seen, our results look more natural and have little artifacts. Our superior results illustrate the robustness and generalization ability of the proposed method.

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Figure 1. Visual comparison among state-of-the-art shadow removal methods: (a) input images, (b) Jung [4], (c) ST-CGAN [6], (d) Fu [3], (e) DHAN [2], (f) BEDSR-Net [5], (g) our BGShadowNet, and (h) ground-truth images.



Figure 2. Visual comparison among state-of-the-art shadow removal methods: (a) input images, (b) Jung [4], (c) Bako [1], (d) ST-CGAN [6], (e) Fu [3], (f) DHAN [2], (g) BEDSR-Net [5], and (h) our BGShadowNet.



Figure 3. Visual comparison among state-of-the-art shadow removal methods: (a) input images, (b) Jung [4], (c)ST-CGAN [6], (d) Fu [3], (e) DHAN [2], (f) BEDSR-Net [5], and (g) our BGShadowNet.



Figure 4. Visual comparison among state-of-the-art shadow removal methods: (a) input images, (b) Jung [4], (c)ST-CGAN [6], (d) Fu [3], (e) DHAN [2], (f) BEDSR-Net [5], and (g) our BGShadowNet.