Supplementary Material for “DPW-SDNet: Dual Pixel-Wavelet Domain Deep CNNs for Soft Decoding of JPEG-Compressed Images”

Honggang Chen  
Sichuan University  
honggang_chen@yeah.net

Xiaohai He  
Sichuan University  
hxh@scu.edu.cn

Linbo Qing  
Sichuan University  
qing_lb@scu.edu.cn

Shuhua Xiong  
Sichuan University  
xiongsh@scu.edu.cn

Truong Q. Nguyen  
UC San Diego  
tqn001@eng.ucsd.edu

In this supplementary material, we present more results produced by the proposed soft decoding method DPW-SDNet. More specifically, Fig. 1 shows the soft decoded results on color JPEG-compressed images. Fig. 2 shows the soft decoded results on gray-scaled JPEG 2000-compressed images. Fig. 3 shows the soft decoded results on color JPEG 2000-compressed images. These results demonstrate the effectiveness of the proposed DPW-SDNet further.

(a) Original image  
(b) JPEG  
(c) Proposed DPW-SDNet

Figure 1. Visual quality comparison of the JPEG-compressed images and soft decoded results using the proposed DPW-SDNet on color images in the case of quality factor 10. Please zoom in for better viewing.
Figure 2. Visual quality comparison of the JPEG 2000-compressed images and soft decoded results using the proposed DPW-SDNet on gray-scaled images in the case of bit-rate 0.3 bpp. Please zoom in for better viewing.
Figure 3. Visual quality comparison of the JPEG 2000-compressed images and soft decoded results using the proposed DPW-SDNet on color images in the case of bit-rate 0.3 bpp. Please zoom in for better viewing.