Enlarged Motion-Aware and Frequency-Aware Network for Compressed Video Artifact Reduction

Anonymous Author(s)
Submission Id:2908

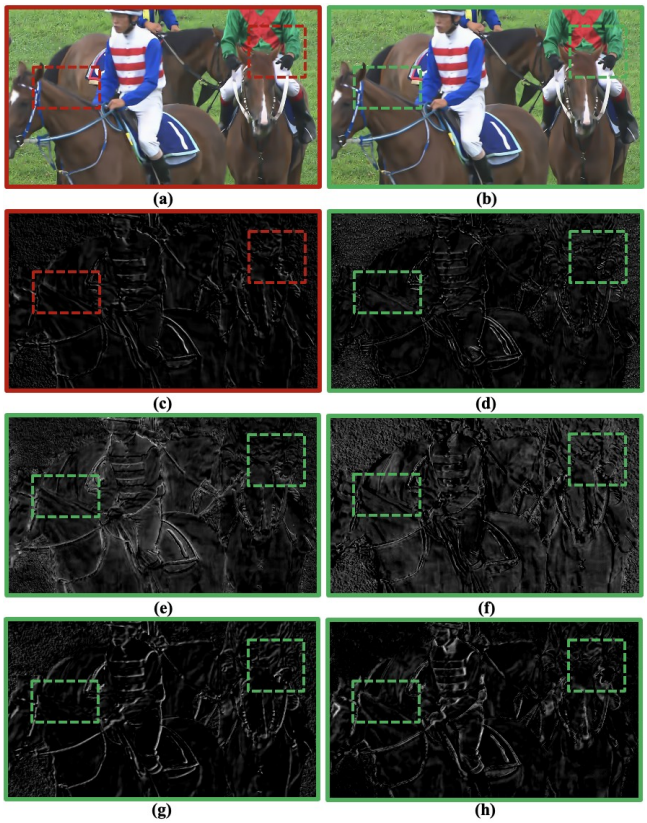

Figure 13: Visualization of feature maps extracted by the proposed MDC module. (a) Restored result of STDR. (b) Restored result of ours. (c) Feature maps of STDR. (d-h) Feature maps of ours. Compared with STDR, our method can capture sufficient features with spatial diversity and frequency diversity. Zoom in for best view.

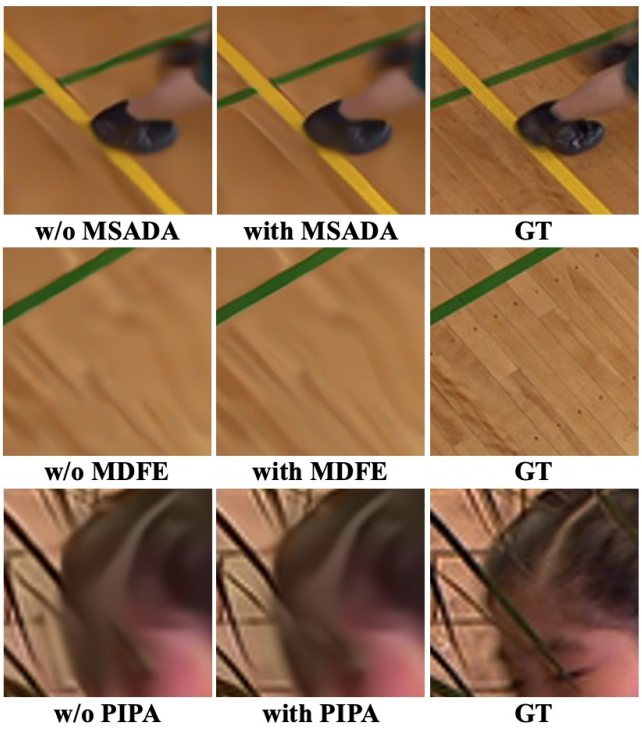

Figure 14: Effectiveness of the proposed modules: MSADA, PIPA and MDFE. The first row in the figure indicates that the MSADA module is able to capture non-local motion information. The structure near the shoe has been further improved. The second row in the figure shows that the MDFE module can enhance features with different frequency. Mid and low frequency textures in ground areas become clearer. The last row in the figure proves that the PIPA module can obtain spatio-temporal information with better global consistency. The ringing effect on the girl's face is effectively removed.

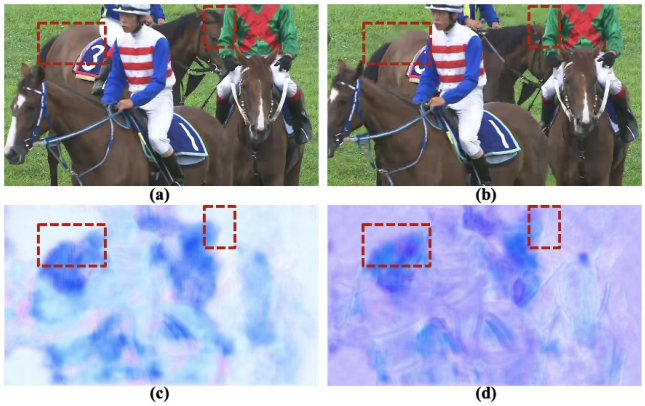

Figure 11: Visualization of offset predicted by the proposed MSADA module. (a)Reference frame. (b)Target frame. (c)Offset of regular deformable convolution. (d) Offset of atrous deformable convolution.

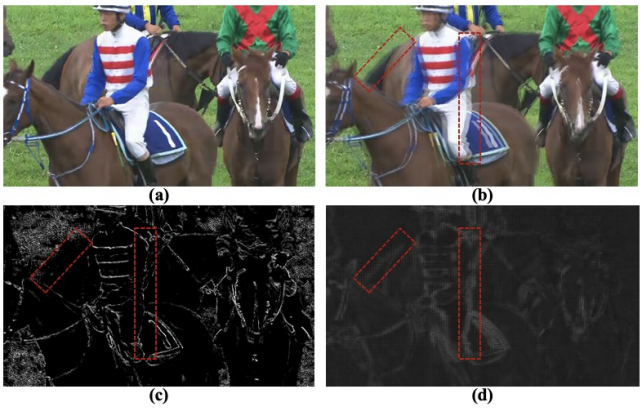

Figure 12: Visualization of feature map extracted by the proposed PIPA module. (a)Reference frame. (b)Overlay of target frame and reference frame. (c)Feature map of pixel-wise deformable convolution. (d) Feature map of patch-wise deformable convolution.

, ,