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References

1. Zhou, M.Q., Sheng, B., Ma, L.Z.: Saliency preserving declorization. Multimedia and Expo, IEEE, Chengdu China(2014)
2. Ma, K., Zhao, T., Zeng, K., Wang, Z.: Objective Quality Assessment for Color-to-Gray Image Conversion. IEEE Transactions on Image Processing, vol. 24, no. 12, pp. 4673-4685(2015)
3. Cheng, M. M., Zhang, G. X., Mitra, N. J.: Global contrast based salient region detection. Computer Vision and Pattern Recognition, IEEE, Providence RI(2011)
4. Smith, K., Landes, P., Thollot, J., Myszkowski, K.: Apparent greyscale: a simple and fast conversion to perceptually accurate images and video. Computer Graphics Forum, vol.27, no. 2, pp.193-200(2008)
5. Song, M., Tao, D., Chen, C., Li, X., Chen, C. W.: Color to gray: visual cue preservation. IEEE Transactions on Pattern Analysis and Machine Intelligence, vol.32, no.9, pp.1537-1552(2010)
6. Hsin, C.H., Le, H.N., Shin, S.J.:Color to grayscale transform preserving natural order of hues. Electrical Engineering and Informatics, IEEE, Bandung(2011)
7. Lu, C.W., Xu, L., Jia, J.Y.:Contrast preserving decolorization. Computational Photography, IEEE, Seattle WA(2012)
8. Gooch, A., Olsen, S., Tumblin, J., Gooch, B.: Color2gray: salience-preserving color removal. ACM Transactions on Graphics (SIGGRAPH), vol.24, pp.634-639(2005)
9. Ancuti,C.A., Ancuti, C., Bekaert, P.:Enhancing by saliency-guided decolorization. Computer Vision and Pattern Recognition, IEEE, Providence RI(2011)
10. Liu, C.W.,Liu T. L.: A sparse linear model for saliency-guided decolorization. Image Processing, IEEE, Melbourne VIC(2013)
11. Du,H., He,S.F., Sheng,B., Ma,L.Z., Lau,R.W.H.: Saliency-guided color-to-gray conversion using region-based optimization. IEEE Transactions on Image Processing, vol.24, no.1, pp.434-443(2015)
12. Lu, C.W., Xu, L., Jia, J.Y.:Real-time contrast preserving decolorization. Siggraph Asia Technical Briefs, vol.110, no.2, pp.1-7(2012)
13. Cadik, M.: Perceptual Evaluation of color-to-grayscale image conversions. Pacific Graphics, vol.27, no.7, pp. 1745-1754(2008)
14. Grundland, M., Dodgson, N. A.: Decolorize: fast, contrast enhancing, color to grayscale conversion. Pattern Recognition, vol.40, no.11, pp.2891-2896(2007)