



JOURNAL OF IMAGE AND GRAPHICS

主办: 中国科学院空天信息创新研究院
中国图象图形学学会
北京应用物理与计算数学研究所

中国图象图形学报

2022
05
VOL.27

ISSN1006-8961
CN11-3758/TB



低质图像增强

低光照图像增强算法综述
(第1392页)融合3D注意力和Transformer
的图像去雨网络(第1509页)融合注意力机制的模糊图像
多尺度复原(第1682页)

《中国图象图形学报》低质图像增强专刊简介

李波, 朱策, 操晓春, 山世光, 石争浩, 潘金山, 刘家瑛, 胡海苗, 任文琦, 陈秀妍 1335

综述

水下光学图像重建方法研究进展

王柯俨, 黄诗芮, 李云松 1337

单幅图像去雨数据集和深度学习算法的联合评估与展望

胡明娣, 吴怡, 宋尧, 杨静冰, 张瑞芳, 王红, 孟德宇 1359

低光照图像增强算法综述

马龙, 马腾宇, 刘日升 1392

图像与视频质量评价综述

程茹秋, 余烨, 石岱宗, 蔡文 1410

图像质量评价研究综述——从失真的角度

鄢杰斌, 方玉明, 刘学林 1430

数据集论文

面向真实水下图像增强的质量评价数据集

顾约瑟, 姜求平, 邵枫, 高伟 1467

图像去雾去雨

适合跨域目标检测的雾霾图像增强

郭强, 浦世亮, 张世峰, 李波 1481

沙尘图像色彩恢复及增强卷积神经网络

石争浩, 刘春月, 任文琦, 都双丽, 赵明华 1493

融合3D注意力和Transformer的图像去雨网络

王美华, 柯凡晖, 梁云, 范衡, 廖磊 1509

联合形态学滤波和卷积稀疏编码的图像去雨

黄淑英, 许亚婷, 杨勇, 管巨伟 1522

多尺度渐进式残差网络的图像去雨

卢贝, 盖杉 1537

低照图像增强

改进融合策略下透明度引导的逆光图像增强

赵明华, 程丹妮, 都双丽, 胡静, 石程, 石争浩 1554

融合注意力机制和上下文信息的微光图像增强

赵兴运, 孙帮勇 1565

多残差联合学习的水下图像增强

陈龙, 丁丹丹 1577

零参考样本下的逆光图像深度学习增强方法

王知音, 张二虎, 石争浩, 段敬红 1589

图像超分辨

跨尺度耦合的连续比例因子图像超分辨率

吴瀚霖, 李宛谕, 张立保 1604

用于单幅模糊图像超分辨的Transformer融合网络

刘花成, 任文琦, 王蕊, 操晓春 1616

图像修复

全细节增强多曝光图像融合

陈彬, 谭新成, 伍世虔 1632

基于卷积自编码生成式对抗网络的高分辨率破损图像修复

侯向丹, 刘昊然, 刘洪普 1645

融合参考先验与生成先验的老照片修复

刘继鑫, 陈瑞, 安仕鹏 1657

区域注意力机制引导的双路虹膜补全

张志礼, 张慧, 王甲, 夏玉峰, 刘亮, 李佩佩, 何召锋 1669

融合注意力机制的模糊图像多尺度复原

陈紫柠, 张宏怡, 曾念寅, 李寒 1682

CONTENTS

JOURNAL OF IMAGE AND GRAPHICS



The review of low-light image enhancement(P1392)



3D attention and Transformer based single image deraining network(P1509)



Attention mechanism embedded multi-scale restoration method for blurred image(P1682)

Review

- An optical reconstruction based underwater image analysis
Wang Keyan, Huang Shirui, Li Yunsong 1337
- The integrated evaluation and review of single image rain removal based datasets and deep learning methods
Hu Mingdi, Wu Yi, Song Yao, Yang Jingbing, Zhang Ruifang, Wang Hong, Meng Deyu 1359
- The review of low-light image enhancement
Ma Long, Ma Tengyu, Liu Risheng 1392
- The critical review of image and video quality assessment methods
Cheng Ruqiu, Yu Ye, Shi Daizong, Cai Wen 1410
- The review of distortion-related image quality assessment
Yan Jiebin, Fang Yuming, Liu Xuelin 1430

Dataset

- A real-world quality evaluation dataset for enhanced underwater images
Gu Yuese, Jiang Qiuping, Shao Feng, Gao Wei 1467

Image defogging/deraining

- Cross-domain object detection based foggy image enhancement
Guo Qiang, Pu Shiliang, Zhang Shifeng, Li Bo 1481
- Convolutional neural networks for sand dust image color restoration and visibility enhancement
Shi Zhenghao, Liu Chunyue, Ren Wenqi, Du Shuangli, Zhao Minghua 1493
- 3D attention and Transformer based single image deraining network
Wang Meihua, Ke Fanhui, Liang Yun, Fan Zhun, Liao Lei 1509
- Image deraining algorithm based on morphological filtering and convolution sparse coding
Huang Shuying, Xu Yating, Yang Yong, Guan Juwei 1522
- Single image rain removal based on multi scale progressive residual network
Lu Bei, Gai Shan 1537

Low illumination image enhancement

- An improved fusion strategy based on transparency-guided backlit image enhancement
Zhao Minghua, Cheng Danni, Du Shuangli, Hu Jing, Shi Cheng, Shi Zhenghao 1554
- An attention mechanism and contextual information based low-light image enhancement method
Zhao Xingyun, Sun Bangyong 1565
- Joint multi-residual learning for underwater image enhancement
Chen Long, Ding Dandan 1577
- Deep learning based backlight image enhancement method derived of zero-reference samples
Wang Zhiyin, Zhang Erhu, Shi Zhenghao, Duan Jinghong 1589

Image super resolution

- Cross-scale coupling network for continuous-scale image super-resolution
Wu Hanlin, Li Wanyu, Zhang Libao 1604
- A super-resolution Transformer fusion network for single blurred image
Liu Huacheng, Ren Wenqi, Wang Rui, Cao Xiaochun 1616

Image inpainting

- Overall detail-enhanced multi-exposure images fusion
Chen Bin, Tan Xincheng, Wu Shiqian 1632
- High-resolution damaged images restoration based on convolutional auto-encoder generative adversarial network
Hou Xiangdan, Liu Haoran, Liu Hongpu 1645
- Reference prior and generative prior linked distorted old photos restoration
Liu Jixin, Chen Rui, An Shipeng 1657
- Region attention mechanism based dual human iris completion technology
Zhang Zhili, Zhang Hui, Wang Jia, Xia Yufeng, Liu Liang, Li Peipei, He Zhaofeng 1669
- Attention mechanism embedded multi-scale restoration method for blurred image
Chen Zining, Zhang Hongyi, Zeng Nianyin, Li Han 1682