

Symposium on Electronic Imaging (EI 2024)

Image Quality and System
Performance XXI

Burlingame, California, USA
21-25 January 2024

ISBN: 979-8-3313-1265-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

CURRAN ASSOCIATES INC.
proceedings
.com

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2024) by Society for Imaging Science & Technology
All rights reserved.

Printed with permission by Curran Associates, Inc. (2025)

For permission requests, please contact Society for Imaging Science & Technology
at the address below.

Society for Imaging Science & Technology
7003 Kilworth Lane
Springfield, Virginia 22151
USA

Phone: 703-642-9090

Fax: 703-642-9094

info@imaging.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Image Information Metrics From Slanted Edges: A Toolkit of Metrics to Aid Object Recognition, Machine Vision, and Artificial Intelligence Systems.....	1
<i>Norman L. Koren</i>	
ISP Tuning for Improved Image Quality in Machine Vision.....	18
<i>Diarmaid Geever, Tim Brophy, Dara Molloy, Martin Glavin, Edward Jones, Brian Deegan</i>	
Benchmarking Motion Blur of Video Frame Interpolation Using Hybrid EVS+CIS Against CIS.....	26
<i>Kamal Rana, Sean Fausz, Zhiyao Yang, Fangwen Tu, Qinyi Wang, Boyd Fowler, Andreas Suess, Bo Mu</i>	
Evaluating Camera Performance in Face-Present Scenes with Diverse Skin Tones	31
<i>Megan Borek, Alexander Schwartz, Amelia Spooner</i>	
From Video Conferences to DSLRs: An In-depth Texture Evaluation with Realistic Mannequins	36
<i>Daniela Carfora Ventura, Gabriel Pacianotto Gouveia, Ana Calarasanu, Valentine Tosel, Nicolas Chahine, Sira Ferradans</i>	
A Novel Deep Learning-Based Anomaly Detection Pipeline Optimized for Dark Blemish Pattern of Image Sensor	42
<i>Dayun Lee, Yubin Lee, Dageom Hong, Kundong Kim, Sung-Su Kim, Yitae Kim</i>	
No-Reference Color Dot Artifact Assessment for Remosaiced Images.....	46
<i>Subin Han, Seungwan Jeon, Sara Lee, Yu Gyeong Lee, Hee-shin Kim, Kichul Park, Sung-Su Kim, Yitae Kim</i>	
Quality of Experience of Virtual Reality-Based Communication Applications	52
<i>Mylene C.Q. Farias</i>	
Evaluation of Subjective Video Quality of Television Displays.....	58
<i>Eddie Pei</i>	
Recommendations for the Detection and Analysis of the ISO 12233:2023 e-SFR Slanted Star	68
<i>Sarah Kerr</i>	
Evaluating Color Transformation Quality and Accuracy of Prosumer and Mobile Phone Cameras for High Dynamic Range Cultural Heritage Documentation	74
<i>Leah Humenuck, Mekides Assefa Abebe</i>	
Assessment of Dynamic Range and Noise in a Natural-Scene Image.....	80
<i>Seungwan Jeon, En-Ji Young, DongOh Kim, DongYoung Song, KiChul Park, Sung-Su Kim, Yitae Kim</i>	
Objective Color Characterization of HDR videos Captured by Smartphones: Laboratory Setups and Analysis Framework.....	85
<i>Anna Tigranyan, Paul Mathieu, Corentin Nannini, François-Xavier Thomas, Mauro Patti Frederic Guichard</i>	

Author Index