IS&T International Symposium on Electronic Imaging Science and Technology 2017

3D Image Processing, Measurement (3DIPM), and Applications 2017

Burlingame, California, USA 29 January – 2 February 2017

Editors:

William Puech Robert Sitnik

ISBN: 978-1-5108-4611-1

Printed from e-media with permission by:

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



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

Copyright© (2017) by Society for Imaging Science & Technology All rights reserved.

Printed by Curran Associates, Inc. (2017)

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

3D Image Processing, Measurement (3DIPM), and Applications 2017

Tuesday, January 31, 2017

Surface Appearance Assessment and Digital Methods I Joint Session

Session Chair: Greg Ward, Dolby Laboratories (United States)

9:10 - 10:10 am

Grand Peninsula Ballroom C

This session is jointly sponsored by: Material Appearance 2017 and 3D Image Processing, Measurement (3DIPM), and Applications 2017.

9:10

Graininess appearance of goniochromatic samples in lighting cabints,

Paola lacomussi, Michela Radis, and Giuseppe Rossi, INRIM (Ilaly) [MAAP-282]

9.30

Measurement and evaluation method of orange peel, Takuroh Sone and Shuhei Watanabe, Ricoh Company, Ltd. (Japan) (MAAP-283)

9:50

Enhanced RTI for gloss reproduction, Peter Fornaro, Andrea Bianco, and Lukas Rosenthaler, Universitiy of Basel (Switzerland) [MAAP-284]

10:00 am - 7:30 pm Industry Exhibition 10:10 - 10:50 am Coffee Break

Surface Appearance Assessment and Digital Methods II JOINT SESSION

Session Chair: Mathieu Hebert, Université Jean Monnet de Saint Etienne (France)

10:50 - 11:50 am

Grand Peninsula Ballroom C

This session is jointly sponsored by: Material Appearance 2017 and 3D Image Processing, Measurement (3DIPM), and Applications 2017.

10:50

Consistent tool-independent virtual material appearance, Dar'ya Guarnera¹, Giuseppe Claudio Guarnera¹, Cornelia Denk², and Mashhuda Glencross^{1,3}; ¹Loughborough University (United Kingdom), ²BMW Research (Germany), and ³Switch That Limited (United Kingdom) [MAAP-285]

11-10

Interactive object surface retexturing using perceptual quality indexes, Keita Hirai, Wataru Suzuki, Yoshimitsu Yamada, and Takahiko Horiuchi, Chiba University (Japan) [MAAP-286]

Thursday, February 2, 2017

3D Image Quality

Session Chair: Aladine Chetouani, University of Orléans (France)

9:10 - 10:10 am

Regency Ballroom A

9:10

A 3D mesh quality metric based on features fusion, Aladine Chetouani, University of Orleans (France) [3DIPM-001]

9:30

3D blind mesh quality assessment index, Anass Nouri, Christophe Charrier, and Olivier Lézoray, Normandie University (France) [3DIPM-002]

9:50

A magnifier on accurate depth jumps, Thomas Hach¹ and Sascha Knob²; ¹Arnold & Richter Cinetechnik and ²Hochschule RheinMain (Germany) [3DIPM-003]

10:10 - 10:50 am Coffee Break

3D Image Analysis

Session Chair: Olivier Strauss, University of Montpellier (France)

10:50 - 11:50 am

Regency Ballroom A

10:50

3D microscopic image construction using high dynamic range imaging, Chi Zheng¹, Salvador Bernal Garcia², and Guoping Qiu¹.²; ¹University of Nottingham, Ningbo (China) and ²University of Nottingham (United Kingdom) [3DIPM-004] [Proceedings Only]

11:10

Digitized 3D mesh segmentation based on curvature analysis, Silvère Gauthier^{1,2}, William Puech¹, Roseline Bénière², and Gérard Subsol¹; ¹University of Montpellier and ²C4W (France) [3DIPM-005]

11:30

Small scale surface profile recovery using a tunable lens based system, Ludovic Angot-Petit, Industrial Technology Research Institute (Taiwan) [3DIPM-006]

3D Imaging Systems

Session Chair: William Puech, University of Montpellier (France)

11:50 am - 12:10 pm

Regency Ballroom A

11:50

A comparison of stereo matching algorithms on multi-core digital signal processor platform, Judicaël Menant, Jean-François Nezan, Luce Morin, and Muriel Pressigout, IETR - INSA de Rennes (France) [3DIPM-007]