PROCEEDINGS

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Electronic Imaging SCIENCE AND TECHNOLOGY

29 January 2017 - 2 February 2017 • Burlingame, CA, USA

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

Editors: William Puech, Lab. d'Informatique de Robotique et de Microelectronique de Montpellier (France), Robert Sitnik, Warsaw Univ. of Technology (Poland)

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

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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 (Italy) [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, University 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]

3D blind mesh quality assessment index, Anass Nouri, Christophe

Charrier, and Olivier Lézoray, Normandie University (France) [3DIPM-002]

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

3D microscopic image construction using high dynamic range imaging,

Chi Zheng¹, Salvador Bernal Garcia², and Guoping Qiu^{1,2}; ¹University of Nottingham, Ningbo (China) and ²University of Nottingham (United Kingdom) [3DIPM-004] [Proceedings Only]

11:10 33

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]