

IS&T International Symposium on Electronic Imaging Science and Technology

**3D Measurement and Data
Processing 2019**

**Burlingame, California, USA
13-17 January 2019**

Editors:

**William Puech
Robert Sitnik**

ISBN: 978-1-7138-1333-0

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© (2019) by Society for Imaging Science & Technology
All rights reserved.

Printed with permission by Curran Associates, Inc. (2020)

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

3D/4D SCANNING AND APPLICATIONS

4D SCANNING SYSTEM FOR MEASUREMENT OF HUMAN BODY IN MOTION.....	1
<i>R. Sitnik, M. Nowak, P. Liberadzki, J. Michonski</i>	
3D MICROSCOPIC IMAGING USING STRUCTURE-FROM-MOTION	7
<i>L. Traxler, S. Stoic</i>	
DEPTH-MAP ESTIMATION USING COMBINATION OF GLOBAL DEEP NETWORK AND LOCAL DEEP RANDOM FOREST	12
<i>S. Kim, D. Lee, B. Ko</i>	

DATA PROCESSING AND VISUALIZATION

REAL-TIME 3D VOLUMETRIC HUMAN BODY RECONSTRUCTION FROM A SINGLE VIEW RGB-D CAPTURE DEVICE	16
<i>R. Diniz, M. Farias</i>	
HOLO REALITY: REAL-TIME LOW-BANDWIDTH 3D RANGE VIDEO COMMUNICATIONS ON CONSUMER MOBILE DEVICES WITH APPLICATION TO AUGMENTED REALITY	20
<i>T. Bel, S. Zhang</i>	
MODIFIED M-ESTIMATION FOR FAST GLOBAL REGISTRATION OF 3D POINT CLOUDS.....	25
<i>F. Azhar, S. Pollard, G. Adams</i>	
CROTCH DETECTION ON 3D OPTICAL SCANS OF HUMAN SUBJECTS	32
<i>S. Sobhiyeh, A. Dunkel, M. Dechenaud, S. Kennedy, J. Shepherd, S. Heymsfield, P. Wolenski</i>	

Author Index