



Date: Wednesday, 07/Jun/2017

8:00am - 6:00pm	Registration desk
seminar room 1.001 (Gæstekantinen)	
9:00am - 9:15am	Opening
seminar room 1.001 (Gæstekantinen)	
9:15am - 10:15am	Keynote 1: 3D Imaging for Research and Industry - from lab to large scale facilities by Camilla Trinderup, PhD, The Imaging Center at DTU - http://www.imaging.dtu.dk/
seminar room 1.001 (Gæstekantinen)	
10:15am - 10:30am	Coffee break
seminar room 1.001 (Gæstekantinen)	
10:30am - 12:30pm	Session 1: Acquisition systems and coding
seminar room 1.001 (Gæstekantinen)	
12:30pm - 1:30pm	Lunch
seminar room 1.001 (Gæstekantinen)	
1:30pm - 3:30pm	Session 2: 3D displays and visualization
seminar room 1.001 (Gæstekantinen)	
3:30pm - 3:45pm	Coffee break
seminar room 1.001 (Gæstekantinen)	
3:45pm - 5:45pm	Session 3: Evaluating of 3D media
seminar room 1.001 (Gæstekantinen)	
6:00pm - 8:00pm	Welcome reception

Date: Thursday, 08/Jun/2017

8:00am - 5:00pm	Registration desk
seminar room 1.001 (Gæstekantinen)	
9:15am - 10:15am	Keynote 2: Why 3D movies are so painful by Dmitriy S. Vatolin, Graphics and Media Lab (GML) Department of Computational Mathematics and Cybernetics of M.V. Lomonosov Moscow State University - http://graphics.cs.msu.ru/en/people/staff/dvatolin
seminar room 1.001 (Gæstekantinen)	
10:15am - 10:30am	Coffee break
seminar room 1.001 (Gæstekantinen)	
10:30am - 12:30pm	Session 4: 3D Applications and services
seminar room 1.001 (Gæstekantinen)	
12:30pm - 1:30pm	Lunch
seminar room 1.001 (Gæstekantinen)	
1:30pm - 3:30pm	Session 5: 3D in VR
seminar room 1.001 (Gæstekantinen)	
3:30pm - 3:45pm	Coffee break
seminar room 1.001 (Gæstekantinen)	
3:45pm - 5:00pm	Round Table: The future of 3D - What is next?



seminar room 1.001 (Gæstekantinen)	Open Discussion on the future of 3D Media: New directions and applications.
7:00pm - 9:00pm	Buffet
Date: Friday, 09/Jun/2017	
9:00am - 2:00pm	Registration desk
seminar room 1.001 (Gæstekantinen)	
9:15am - 10:15am	Keynote 3: Creating and Accessing 3D Content by Dr. Henrik Aanaes, associate professor in computer vision at the Technical University of Denmark - http://people.compute.dtu.dk/aanes/
seminar room 1.001 (Gæstekantinen)	
10:15am - 10:30am	Coffee break
seminar room 1.001 (Gæstekantinen)	
10:30am - 1:15pm	Session 6: 3D sensors and depth cameras
seminar room 1.001 (Gæstekantinen)	
1:15pm - 1:30pm	Closing
seminar room 1.001 (Gæstekantinen)	

Presentations

Session 1: Acquisition systems and coding

Time: Wednesday, 07/Jun/2017: 10:30am - 12:30pm · Location: seminar room 1.001 (Gæstekantinen)

Acquisition system for dense lightfield of large scenes

Matthias Ziegler, Ron op het Veld, Joachim Keinert, Frederik Zilly

Fraunhofer IIS, Germany; matthias.ziegler@iis.fraunhofer.de

ROBUST DISPARITY ESTIMATION ON SPARSE SAMPLED LIGHT FIELD IMAGES

Yan Li, Gauthier Lafruit

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MIXED-RESOLUTION HEVC BASED MULTIVIEW VIDEO CODEC

Bruhanth Mallik, Akbar Sheikh Akbari, Ah-Lian Kor

Leeds Beckett University, United Kingdom; b.mallik6347@student.leedsbeckett.ac.uk

Lossless compression of subaperture images using context modeling

Ionut Schiopu¹, Moncef Gabbouj¹, Atanas Gotchev¹, Miska M. Hannuksela²

¹Tampere University of Technology, Finland; ²Nokia Technologies, Finland; ionut.schiopu@tut.fi

Simulation of Microlens Array Based Plenoptic Capture Utilizing Densely Sampled Light Field

Ugur Akpinar, Erdem Sahin, Atanas Gotchev

Tampere University of Technology; atanas.gotchev@tut.fi



Session 2: 3D displays and visualization

Time: Wednesday, 07/Jun/2017: 1:30pm - 3:30pm · *Location:* seminar room 1.001 (Gæstekantinen)

EXTREME FIELD-OF-VIEW FOR HEAD-MOUNTED DISPLAYS

Ismo Rakkolainen¹, Roope Raisamo¹, Matthew Turk², Tobias Höllerer², Karri Palovuori³

¹University of Tampere; ²University of California, Santa Barbara; ³Tampere University of Technology; ismo.rakkolainen@uta.fi

COLOR MOIRÉ REDUCTION AND RESOLUTION ENHANCEMENT TECHNIQUE FOR INTEGRAL THREE-DIMENSIONAL DISPLAY

Hisayuki Sasaki, Naoto Okaichi, Hayato Watanabe, Masanori Kano, Masahiro Kawakita, Tomoyuki Mishina
Japan Broadcasting Corporation (NHK), Japan; sasaki.h-ey@nhk.or.jp

Automatic 2D to Stereoscopic Video Conversion for 3D TVs

Xichen Zhou, Bipin C. Desai, Charalambos Poullis
Concordia University, Canada; charalambos@poullis.org

WEIGHTED REGULARIZED LAPLACIAN INTERPOLATION FOR CONSOLIDATION OF HIGHLY-INCOMPLETE TIME VARYING POINT CLOUDS

Gerasimos Arvanitis, Aris Lalos, Konstantinos Moustakas, Nikos Fakotakis
University of Patras, Greece; arvanitis@ece.upatras.gr

Accurate multi-view stereo by selective expansion

Hu Tian, Fei Li

Fujitsu Research&Development Center Co., Ltd., China, People's Republic of; tianhu@cn.fujitsu.com

Session 3: Evaluating of 3D media

Time: Wednesday, 07/Jun/2017: 3:45pm - 5:45pm · *Location:* seminar room 1.001 (Gæstekantinen)

Automatic Subjective Quality Estimation of 3D Stereoscopic Videos: NR-RR Approach

Hossein Malekmohamadi

De Montfort University, United Kingdom; hossein.malekmohamadi@dmu.ac.uk

A DEPTH PERCEPTION EVALUATION METRIC FOR IMMERSIVE 3D VIDEO SERVICES

Gokce Nur Yilmaz

Kirikkale University, Turkey; nur.gkc@gmail.com

READ-THE-GAME SKILL EVALUATION BY ANALYZING HEAD ORIENTATION IN IMMERSIVE VR

César Daniel Rojas Ferrer¹, Itaru Kitahara², Yoshinari Kameda²

¹Graduate School of Systems and Information Engineering, University of Tsukuba; ²Center for Computational Sciences, University of Tsukuba; s1620853@u.tsukuba.ac.jp

VIEWPORT-DEPENDENT DELIVERY SCHEMES FOR STEREOSCOPIC PANORAMIC VIDEO

Ramin Ghaznavi-Youvalari¹, Miska Hannuksela¹, Alireza Aminlou¹, Moncef Gabbouj²

¹Nokia Technologies, Finland; ²Tampere University of Technology; ramin.ghaznavi-youvalari@nokia.com

Smoothly Switching Method of Asynchronous Multi-View Videos Using Frame Interpolation

Aoi Harazaki, Hidehiko Shishido, Yoshinari Kameda, Itaru Kitahara

University of Tsukuba, Japan; s1330212@gmail.com



Session 4: 3D Applications and services

Time: Thursday, 08/Jun/2017: 10:30am - 12:30pm · *Location:* seminar room 1.001 (Gæstekantinen)

SOFTWARE TOOLS FOR ANALYSIS AND VISUALIZATION OF THE ANTIKYTHERA MECHANISM

Eleftherios Anastasovitis^{2,1}, Manos Roumeliotis²

¹Centre for Research and Technology Hellas, Greece; ²University of Macedonia, Greece; manos@uom.gr

Physical Forces Aware Aging Simulation on Cultural Heritage Artifacts

Evdoxia Taka, Konstantinos Papachristou, Anastasios Drosou, Nikolaos Dimitriou, Dimitrios Tzouvaras

CERTH/ITI, Greece; kostas.papachristou@iti.gr

Caravaggio in Rome: a QoE-based proposal for a Virtual Gallery

Chiara Di Stefano, Federica Battisti

Roma Tre University, Italy; federica.battisti@uniroma3.it

DIGIART: BUILDING NEW 3D CULTURAL HERITAGE WORLDS

Eleftherios Anastasovitis, Dimitrios Ververidis, Spiros Nikolopoulos, Ioannis Kompatsiaris

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Collaborative 3D Accessories Customization and Trading through Web Interface

Chin Pok Hui¹, Wai-Man Pang¹, Vane-Ing Tian²

¹Caritas Institute of Higher Education, Hong Kong S.A.R. (China); ²The Open University of Hong Kong; wmpang@ieee.org

Session 5: 3D in VR

Time: Thursday, 08/Jun/2017: 1:30pm - 3:30pm · *Location:* seminar room 1.001 (Gæstekantinen)

Design of an Annotation System for taking notes in Virtual Reality

Damien Clergeaud^{1,2}, Pascal Guitton^{2,1}

¹INRIA, France; ²Université de Bordeaux, France; damien.clergeaud@inria.fr

VISUAL REALISM AND PRESENCE IN A VIRTUAL REALITY GAME

Jonatan Hvass, Oliver Larsen, Kasper Vendelbo, Niels Nilsson, Rolf Nordahl, Stefania Serafin

Aalborg University Copenhagen, Denmark; ncn@create.aau.dk

Wireless Controller for Interactive Virtual Reality Games

Seyedmahdi Kazempourradi, Seyfettin Onurhan Ozturk, Murat Berke Erdemli, Burak Gulerce, Mahmut Sami Yazici, Levent Ozmen, Can Hakan Dagidir, Sidem Isil Tuncer, Erdem Ulusoy, Hakan Urey

Koc University, Electrical Engineering Department, Optical Microsystems Laboratory, Turkey; mkazempour14@ku.edu.tr

Body-part tracking from partial-view depth data

Manolis Vasileiadis, Dimitris Giakoumis, Sotiris Malassiotis, Ioannis Kostavelis, Dimitrios Tzouvaras

Information Technologies Institute, Centre for Research and Technology Hellas, Greece; tzouvaras@iti.gr

A Client-Server Architecture for Real-time View-Dependent Streaming of Free-Viewpoint Video

Jonas Scheer¹, Carlos Fernández de Tejada Quemada¹, Oliver Grau²

¹Saarland University, Intel Visual Computing Institute; ²Intel; jonas.scheer@intel-vci.uni-saarland.de



Session 6: 3D sensors and depth cameras

Time: Friday, 09/Jun/2017: 10:30am - 1:15pm · *Location:* seminar room 1.001 (Gæstekantinen)

THE USE OF ADVANCED IMAGING TECHNOLOGY IN WELFARE TECHNOLOGY SOLUTIONS – SOME ETHICAL ASPECTS

Kari K. Lilja^{1,3}, Jari Palomäki²

¹Tampere University of Technology, Finland; ²Tampere University of Technology, Finland; ³Satakunta University of Applied Sciences; kari.lilja@kolumbus.fi

LOW COST EMBEDDED VISION SYSTEM FOR LOCATION AND TRACKING OF A COLOR OBJECT

Diego Ayala, Danilo Chavez

Escuela Politécnica Nacional, Ecuador; diego.ayalac@epn.edu.ec

SpAtIAL: A Sensor based Framework to Support Affective Learning

Anastasios Karakostas¹, Dimitrios Ververidis², Spiros Nikolopoulos³, Ioannis Kompatsiaris⁴

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DETECTING WALKABLE PLANE AREAS BY USING RGB-D CAMERA AND ACCELEROMETER FOR VISUALLY IMPAIRED PEOPLE

Kenta Imai¹, Itaru Kitahara², Yoshinari Kameda²

¹Graduate School of Systems and Information Engineering, University of Tsukuba; ²Center for Computational Sciences, University of Tsukuba; s1620749@u.tsukuba.ac.jp

Adaptive Filter for Denoising 3D Data captured Depth Sensors

Somar Boubou, Tatsuo Narikiyo, Michihiro Kawanishi

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Depth camera driven mobile robot for human localization and following

N. Skordilis, L. Nalpantidis, G. Triantafyllidis

AAU-CPH, Denmark; gt@create.aau.dk

Stereo Camera Upgraded to Equal Baseline Multiple Camera Set (EBMCS)

Adam L. Kaczmarek

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