



ACM SIGGRAPH



Association for
Computing Machinery



UNIVERSITAT DE
BARCELONA

ACM Symposium on Applied Perception Barcelona 2019

Schedule

Wednesday, 18 September

Event	Time
Preregistration	5:00 p.m. - 7:00 p.m.
Informal social event	from 7:30 p.m.

Thursday, 19 September

Event	Time
Registration	9:00 a.m. - 10:00 a.m.
Welcome and Opening remarks	10:00 a.m. - 10:15 a.m.
Keynote speaker	10:15 a.m. - 11:15 a.m.
Poster Fast-forward	11:15 a.m. - 11:30 a.m.
Coffee and Posters	11:30 a.m. - 12:00 p.m.
Papers - Session 1 <i>Virtual Space</i>	12:00 p.m. - 1:15 p.m.
Lunch break	1:15 p.m. - 3:00 p.m.
Papers - Session 2 <i>Human Motions</i>	3:00 p.m. - 4:30 p.m.
Coffee and Posters	4:30 p.m. - 5:00 p.m.
Papers - Session 3 <i>Avatars and Rendering Humans</i>	5:00 p.m. - 7:00 p.m.
Reception	from 7:00 p.m.

Friday, 20 September

Event	Time
Registration	9:00 a.m. - 10:15 a.m.
Papers - Session 4 <i>Viewpoint in VR</i>	10:15 a.m. - 11:45 a.m.
Coffee and Posters	11:45 a.m. - 12:15 p.m.
Papers - Session 5 <i>Haptics and Images</i>	12:15 p.m. - 1:15 p.m.
Lunch break	1:15 p.m. - 3:00 p.m.
BUSINESS MEETING	3:00 p.m. - 3:30 p.m.
Papers - Session 6 <i>Gaze and Attention</i>	3:30 p.m. - 5:30 p.m.
Coffee and Posters	5:30 p.m. - 6:00 p.m.
Cap Note Speaker	6:00 p.m. - 7:00 p.m.

Accepted papers

Session 1: Virtual Space

Chair: Victoria Interrante

Infinity Walk in VR: Effects of Cognitive Load on Velocity during Continuous Long-Distance Walking.

Omar Janeh, Nikolaos Katzakis, Jonathan Tong, & Frank Steinicke (20')

Stimulating the Brain in VR: Effects of Transcranial Direct-Current Stimulation on Redirected Walking.

Eike Langbehn, Frank Steinicke, Ping Koo-Poeggel, Lisa Marshall, & Gerd Bruder (20')

Perception of Spatial Relationships in Impossible Spaces.

Andrew Robb & Catherine Barwulor (15')

How Video Game Locomotion Methods Affect Navigation in Virtual Environments.

Richard Paris, Joshua Klag, Priya Rajan, Lauren Buck, Timothy McNamara, & Bobby Bodenheimer (20')

Session 2: Human Motions

Chair: Katja Zibrek

EVA: Modeling Perceived Emotions of Virtual Agents using Expressive Features of Gait and Gaze.

Tanmay Randhavane, Aniket Bera, Kyra Kapsaskis, Rahul Sheth, Kurt Gray, & Dinesh Manocha (20')

Perceptual Comparison of Synthetic and Data-Driven Detailed Eye Motion.

Sophie Joerg, Andrew Duchowski, Krzysztof Krejtz, & Anna Niedzielska (15')

Predicting perceived naturalness of human animations based on generative movement primitive models.

Benjamin Knopp, Dmytro Velychko, Johannes Dreibrodt, & Dominik Endres (20')

Do We Have to Look at the Mirror All the Time? Effect of Partial Visuomotor Feedback on Body Ownership of a Virtual Human Tail.

Ryota Ito, Nami Ogawa, Takuji Narumi, & Michitaka Hirose (20')

Session 3: Avatars and Rendering Humans

Chair: Bobby Bodenheimer

Emotion and Attention Interplay Examination During Interaction with Virtual Humans.

Matias Volonte, Reza Ghaiumy Anaraky, Bart Knijnenburg, Andrew T. Duchowski, & Sabarish V. Babu (20')

A psychophysical model to control the brightness and key-to-fill ratio in CG cartoon character lighting.

Pisut Wisessing, Katja Zibrek, Douglas Cunningham, & Rachel McDonnell (15')

Is photorealism important for perception of expressive virtual humans in VR?

Katja Zibrek, Rachel McDonnell, & Sean Martin (20')

The Influence of the Viewpoint in a Self-Avatar on Body Part and Self-Localization.

Albert van der Veer, Adrian Alsmith, Matthew Longo, Hong Yu Wong, Daniel Diers, Anna Giron, Matthias Bues, & Betty Mohler (20')

Virtual Grasping Feedback and Virtual Hand Ownership.

Ryan Canales, Aline Normoyle, Yu Sun, Yuting Ye, Massimiliano Di Luca, & Sophie Joerg (20')

The Influence of Visual Perspective on Body Size Estimation in Immersive Virtual Reality.

Anne Thaler, Sergi Pujades, Jeanine Stefanucci, Sarah Creem-Regehr, Joachim Tesch, Michael Black, & Betty J. Mohler (20')

Session 4: Viewpoint in VR

Chair: Frank Steinicke

An Analysis of User Perception Regarding Body-Worn 360 Camera Placements and Heights.

Kevin Pfeil, Pamela Wisniewski, & Joseph J. Laviola (20')

Keep it simple: Depth-based Dynamic Adjustment of Rendering for Head-mounted Displays Decreases Visual Comfort.

Jochen Jacobs, Xi Wang, & Marc Alexa (20')

Am I Floating or Not?: Fidelity of Eye Height Perception in HMD-based Immersive Virtual Environments. Zhihang Deng & Victoria Interrante (15')

Differences in Visual and Haptic Perception of Expressive 1DoF Motion.

Elyse Chase & Sean Follmer (20')

Session 5: Haptics and Images

Chair: Robert Allison

The Effect of Motion on the Perception of Material Appearances.

Ruiquan Mao, Manuel Lagunas, Belen Masia, & Diego Gutierrez (20')

Comparison of subjective methods, with and without reference, for quality assessment of 3D graphics.

Yana Nehmé, Jean-Philippe Farrugia, Florent Dupont, Patrick LeCallet, & Guillaume Lavoué (20')

Spectral Visualization Sharpening.

Liang Zhou, Rudolf Netzel, Daniel Weiskopf, & Chris Johnson (20')

Session 6: Gaze and Attention

Chair: Eakta Jain

Transsaccadic Awareness of Scene Transformations in a 3D Virtual Environment.

Maryam Keyvanara & Robert Allison (20')

Measurements of contrast sensitivity for peripheral vision.

Michał Chwesiuk & Radosław Mantiuk (20')

Reading Speed Decreases for Fast Readers Under Gaze-Contingent Rendering.

Rachel Albert, Angelica Godinez, & David Luebke (15')

Towards VR Attention Guidance: Environment-dependent Perceptual Threshold for Stereo Inverse Brightness Modulation.

Steve Grogorick, Jan-Philipp Tauscher, Georgia Albuquerque, Marc Kassubeck, & Marcus Magnor (15')

Assessment of Driver Attention during a Safety Critical Situation in VR to Generate VR based Training.

Efe Bozkir, David Geisler & Enkelejda Kasneci (15')

The effect of task on visual attention in interactive virtual environments.

Jacob Hadnett-Hunter, Eamonn O'Neill, Michael Proulx, & George Nicolaou (20')

Accepted posters

A Glyph-based Multimodal Presentation of Multivariate Data.

Shamima Yasmin

Adult to Child Age Regression Using CycleGANs.

Thomas Domas, Yuzhu Dong, Brendan John, Ariel Shamir, Andreas Aristidou, & Eakta Jain

Age Regression for Human Voices.

Martin T. Schorrad & Douglas Cunningham

Child2adult: Revisiting dynamic scaling laws to age motion.

Yuzhu Dong, Lisa Anthony, & Eakta Jain

Effect of Observing a Virtual Double on Paranoia in Social Virtual Environments: Experiment Preliminary Presentation.

Geoffrey Gorisse & Mel Slater

Evaluation of Low-Cost Embodiment with Virtual Avatars.

Dmitry Vyakhirev, Kelley Parsons, Jack Tsao, Betsy Williams, & Daniel Blustein

FVA: Modeling Perceived Friendliness of Virtual Agents Using Movement Characteristics.

Tanmay Randhavane, Aniket Bera, Kyra Kapsaskis, Kurt Gray, & Dinesh Manocha

Identifying Emotions from Walking Using Affective & Deep Features.

Tanmay Randhavane, Uttaran Bhattacharya, Aniket Bera, Kyra Kapsaskis, Kurt Gray, & Dinesh Manocha

Perception of blendshape importance for virtual faces.

Emma Carrigan, Katja Zibrek, Rachel McDonnell

Proteus Effect of a Muscular Avatar on Weight Perception in Virtual Reality.

Kentaro Sumida, Nami Ogawa, Takuji Narumi, & Hirose Michitaka

Realistic Virtual H& Fosters Self-attribution of Remapped H& Movements.

Nami Ogawa, Takuji Narumi, & Michitaka Hirose

Sounds for directing visual attention in real-world scenes.

Daria Kvasova & Salvador Soto-Faraco

The Detectability of Computational Delay in Haptic Rendering.

Diar Abdulkarim, Min Li, Massimiliano Di Luca, Roberta Roberts & Alan Wing

The Effect of Tactile Delay on Subjective Perception of Virtual Surface.

Min Li, Massimiliano Di Luca, Diar Abdulkarim, Roberta Roberts, & Alan Wing

The Influence of Step Length to Step Frequency Ratio on the Perception of Virtual Walking Motions.

Benjamin Niay, Anne-Hélène Olivier, Julien Pettré, & Ludovic Hoyet

Wide Computationalism & Perceptual Problem Solving.

Pankaj Singh