

Partners in Science 2017

Academic Studies using WorldViz Technology

October 2016 - February 2018



WorldViz is proud to present its third consecutive annual Partners in Science Report: In 2017, more than 80 published research studies utilized a WorldViz VR solution. Our first [WorldViz Partners in Science Report](#) from 2015 highlighted 70 previously published studies.

Universities around the world are using cutting-edge WorldViz VR solutions to broaden the horizon of scientific understanding. Virtual reality is a powerful research tool allowing for unprecedented experimental control within fully immersive stimuli. This WorldViz Partners in Science Report highlights published studies from our partners - top scientific researchers embracing virtual reality to advance their field.

The 2017 report is organized by scientific field: *Architecture, Computer Science, Engineering, Neuroscience, Physiology, Psychology*.

Links to the published journal articles for each study along with the authors are provided below. As some of the papers are hosted on SpringerLink and IEEE, you'll need to use your university license to access them.

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Alexandria University, Egypt

*Department of Architecture,
Faculty of Engineering*

Researcher: Fekry Fares | Dina SamehTaha | Zeyad Tarek EL Sayad

Title of Paper/Research: [Achieving public participation in inaccessible areas using virtual reality a case study of Beit Hanoun – Gaza – Palestine](#)

Journal: Alexandria Engineering Journal

Date: August, 2017

University of Bremen

*The DesignSpace Group,
Faculty of Mathematics and Informatics*

Researcher: Mehul Bhatt | Carl Schultz

Title of Paper/Research: [People-Centered Visuospatial Cognition: Next-Generation Architectural Design Systems and Their Role in Design Conception, Computing, and Communication](#)

Journal: The Active Image. Philosophy of Engineering and Technology, vol 28.

Date: July, 2017

Yunnan Minzu University Chenggong

*School of Electronic and
Information Engineering*

Researcher: Yilong Ren | Xitong Duan | Lei Wu | Jin He | Wu Xu

Title of Paper/Research: Research on multi - channel interactive virtual assembly system for power equipment under the „VR+“ era

Journal: IOP Conf. Series: Earth and Environmental Science 69 (2017) 012202

Date: 2017

Bowie State University

Department of Computer Science

Researcher: Sharad Sharma | Emmanuel Ossuetta

Title of Paper/Research: Virtual Reality Instructional Modules in Education Based on Gaming Metaphor

Journal: Electronic Imaging, The Engineering Reality of Virtual Reality 2017

Date: January, 2017

Bowie State University

Department of Computer Science

Human Research and Engineering Directorate

Army Research Laboratory

Researcher: Sharad Sharma | Phillip Devreaux | David Scribner | Jock Grynovicki

Peter Grazaitis

Title of Paper/Research: Megacity: A Collaborative Virtual Reality Environment for Emergency Response, Training, and Decision Making

Journal: Electronic Imaging, Visualization and Data Analysis 2017

Date: January, 2017

Massachusetts Institute of Technology

Researcher: Omid Abari | Dinesh Bharadia | Austin Duffield | Dina Katabi

Title of Paper/Research: [Enabling High-Quality Untethered Virtual Reality](#)

Journal: Proceedings of the 14th USENIX Symposium on Networked Systems Design and Implementation (NSDI '17)

Date: March, 2017

Bowie State University

Department of Computer Science

Researcher: James Stigall | Sharad Sharma

Title of Paper/Research: [Virtual reality instructional modules for introductory programming courses](#)

Journal: Integrated STEM Education Conference (ISEC), 2017 IEEE

Date: April, 2017

Carleton University

School of Information Technology

York University

Department of Psychology

Researcher: Thomas S. Young | Robert J. Teather | I. Scott MacKenzie

Title of Paper/Research: [An arm-mounted inertial controller for 6DOF input: Design and evaluation](#)

Journal: 2017 IEEE Symposium on 3D User Interfaces (3DUI)

Date: April, 2017

South Dakota School of Mines and Technology

Rapid City

*Department of Mathematics and
Computer Science*

Researcher: Lisa Rebenitsch | Charles Owen

Title of Paper/Research: [Evaluating Factors Affecting Virtual Reality Display](#)

Journal: VAMR 2017: Virtual, Augmented and Mixed Reality

Date: May, 2017

Michigan State University Lansing

*Department of Computer Science
and Engineering*

University of the Peloponnese Tripolis

*Department of Informatics and
Telecommunications*

Researcher: Georgios Lepouras

Title of Paper/Research: [Comparing methods for numerical input in immersive virtual environments](#)

Journal: Virtual Reality, March 2018, Volume 22, Issue 1

Date: May, 2017

Universidade Federal Fluminense Niteroi

Computing Institute

Universidade Federal Fluminense Rio de Janeiro

*Antonio Pedro Hospital -
Radiology Department*

Researcher: André Luiz Brazil | Aura Conci | Esteban Clua | Leonardo Kayat Bittencourt
Lúcia Blondet Baruque

Title of Paper/Research: [A virtual environment for breast exams practice with Haptics and gamification](#)

Journal: 2017 IEEE 5th International Conference on Serious Games and Applications for Health (SeGAH)

Date: June, 2017

Digital Media Dep., Fundação CECIERJ Rio de Janeiro

Keele University Staffordshire

School of Computing and Mathematics

University of Nottingham Ningbo

*NVIDIA Joint-Lab on Mixed Reality,
NVIDIA Technology Centre*

Birmingham City University

*School of Engineering, Design and
Manufacturing Systems*

Goethe-Universität, Germany

Institut für Archäologische Wissenschaften

Manchester Metropolitan University

School of Engineering

University of Birmingham

*School of Electronic, Electrical and
Computer Engineering*

York University

Department of Computer Science

Researcher: Sandra I. Woolley | Eugene Ch'ng | Luis Hernandez-Munoz | Erlend Gehlken
Tim Collins | David Nash | Laurence Hanes | Andrew Lewis

Title of Paper/Research: [A Collaborative Artefact Reconstruction Environment](#)

Journal: Proceedings of British HCI 2017 Conference, Sunderland UK

Date: July, 2017

York University Toronto

*Department of Electrical Engineering
and Computer Science*

Researcher: Jingbo Zhao | Robert S. Allison

Title of Paper/Research: [Real-Time Head Gesture Recognition on Head Mounted Displays
using Cascaded Hidden Markov Models](#)

Journal: IEEE SMC 2017, Banff, Canada

Date: July, 2017

University of Bremen

*The DesignSpace Group, Faculty of
Mathematics and Informatics*

Researcher: Mehul Bhatt | Carl Schultz

Title of Paper/Research: People-Centered Visuospatial Cognition: Next-Generation Architectural Design Systems and Their Role in Design Conception, Computing, and Communication

Journal: The Active Image. Philosophy of Engineering and Technology, vol 28.

Date: July, 2017

Sharif College of Engineering and Technology Lahore

Department of Computer Science

The University of Lahore

Department of Computer Science & IT

COMSATS Institute of Information Technology Lahore

Department of Computer Science

King Fahd University of Petroleum and Minerals

Department of Electrical Engineering

Researcher: Muhammad Shoaib | Ibrar Hussain | Hamid Turab Mirza | Muhammad Tayyab

Title of Paper/Research: The role of information and innovative technology for rehabilitation of children with Autism: A Systematic Literature Review

Journal: 2017 17th International Conference on Computational Science and Its Applications (ICCSA)

Date: August, 2017

Universidad Veracruzana

Research center for artificial intelligence

Researcher: Ericka Janet Rechy-Ramirez | Antonio Marin-Hernandez | Homero Vladimir Rios-Figueroa

Title of Paper/Research: [Impact of commercial sensors in human computer interaction: a review](#)

Journal: Journal of Ambient Intelligence and Humanized Computing

Date: August, 2017

Hanyang University Seoul

*Human-Computer Interaction Lab.,
Department of Computer Science*

*Computer Graphics & Animation Lab.,
Department of Computer Science*

Researcher: Mingyu Kim | Taesoo Kwon | Kwanguk Kim

Title of Paper/Research: [Can Human–Robot Interaction Promote the Same Depth of Social Information Processing as Human–Human Interaction?](#)

Journal: International Journal of Social Robotics, January 2018, Volume 10, Issue 1

Date: September, 2017

University of Tampere

Tampere Unit for Computer-Human Interaction

Humboldt-University Berlin

Department of Neurobiology

Researcher: Pekka Kallioniemi | Ville Mäkelä | Santeri Saarinen | Markku Turunen
York Winter | Andrei Istudor

Title of Paper/Research: [User Experience and Immersion of Interactive Omnidirectional Videos in CAVE Systems and Head-Mounted Displays](#)

Journal: INTERACT 2017: Human-Computer Interaction – INTERACT 2017

Date: September, 2017

Bowie State University

Department of Computer Science

Coppin State University

*Department of Mathematics and
Computer Science*

Researcher: Sharad Sharma | Rajeev Sarika | Atma Sahu

Title of Paper/Research: [Game Theme Based Instructional Module to teach Binary Trees
Data Structure](#)

Journal: Proceedings of ISCA 26th International Conference on Software Engineering and Data Engineering (SEDE-2017), pp. 13-18, San Diego, CA, USA, October 2-4, 2017

Date: October, 2017

Bowie State University

Department of Computer Science

Researcher: James Stigall | Sharad Sharma

Title of Paper/Research: [Virtual Reality Instructional Modules for Introductory
Programming Courses](#)

Journal: Integrated STEM Education Conference (ISEC), 2017 IEEE

Date: November, 2017

Qatar University Doha

*Computer Science and Engineering
Department*

The British University in Egypt Cairo

Informatics and Computer Science

Researcher: Osama Halabi | Samir A. El-Seoud | Jihad M. Alja'am | Hena Alpona
Moza Al-Hemadi | Dabia Al-Hassan

Title of Paper/Research: [Design of Immersive Virtual Reality System to Improve
Communication Skills in Individuals with Autism](#)

Journal: International Journal of Emerging Technologies in Learning

Date: November, 2017

Bowie State University

Department of Computer Science

Researcher: Sharad Sharma

Title of Paper/Research: [A Collaborative Virtual Environment for Safe Driving in a Virtual City by Obeying Traffic Laws](#)

Journal: Journal of Traffic and Logistics Engineering, Vol. 5, No. 2

Date: December, 2017

Villanova University

Department of Electrical and Computer Engineering

Computing Sciences Department

Department of Astrophysics and Planetary Science

Researcher: Edward Harriett | Kyle Conroy | Andrej Prša | Frank Klassner

Title of Paper/Research: [Interfacing modeling suite Physics Of Eclipsing Binaries 2.0 with a Virtual Reality Platform](#)

Journal: American Astronomical Society, AAS Meeting #231, id.#244.07

Date: January, 2018

Vanderbilt University

Physics & Astronomy Department

Vanderbilt University

*School of Engineering, Electrical Engineering
and Computer Science Department
Department of Psychology and Human
Development*

Researcher: Richard A. Paris | Timothy P. McNamara | John J. Rieser

Title of Paper/Research: [A comparison of methods for navigation and wayfinding in large virtual environments using walking](#)

Journal: 2017 IEEE Virtual Reality (VR)

Date: March, 2017

Rochester Institute of Technology

College of Engineering

Researcher: Evan Krueger | Erik Messier | Cristian A. Linte | Gabriel Diaz

Title of Paper/Research: [An interactive, stereoscopic virtual environment for medical imaging visualization, simulation and training](#)

Journal: Proceedings Volume 10136, Medical Imaging 2017: Image Perception, Observer Performance, and Technology Assessment

Date: March, 2017

Poznan University of Technology

*Chair of Management and Production
Engineering*

Researcher: Paweł Buń | Filip Górski | Przemysław Zawadzki | Radosław Wichniarek
Adam Hamrol

Title of Paper/Research: [Selection of Optimal Software for Immersive Virtual Reality Application of City Bus Configurator](#)

Journal: WorldCIST 2017: Recent Advances in Information Systems and Technologies

Date: March, 2017

University of Utah

Department of Psychology

Vanderbilt University

School of Engineering

Researcher: Bobby Bodenheimer | Sarah Creem-Regehr | Elena Shemetova

Jeanine Stefanucci | William B. Thompson

Title of Paper/Research: [Prism aftereffects for throwing with a self-avatar in an immersive virtual environment](#)

Journal: 2017 IEEE Virtual Reality (VR)

Date: April, 2017

**South Dakota School of Mines and Technology
Rapid City**

*Department of Mathematics and
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Date: May, 2017

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*School of Engineering, Design and
Manufacturing Systems*

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Institut für Archäologische Wissenschaften

Manchester Metropolitan University

School of Engineering

University of Birmingham

*School of Electronic, Electrical and
Computer Engineering*

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Therapy*

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and Computer Science*

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Journal: Alexandria Engineering Journal

Date: August, 2017

University of Manitoba

Department of Mechanical Engineering

Researcher: Qingjin Peng | Yu Xiao

Title of Paper/Research: Body Gesture-Based User Interaction in Design Review

Journal: ASME 2017 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference

Date: August, 2017

**Sharif College of Engineering and Technology
Lahore**

Department of Computer Science

The University of Lahore

Department of Computer Science & IT

**COMSATS Institute of Information Technology
Lahore**

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Minerals**

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Moza Al-Hemadi | Dabia Al-Hassan

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Journal: International Journal of Emerging Technologies in Learning

Date: November, 2017

**Institute for Occupational Safety and Health
of the German Social Accident Insurance (IFA)
Sankt Augustin**

**DGUV Expert-Committee 'Trade and Logistics',
Sub-Committee 'Goods Handling, Storage and
Logistics' and BGHW Mannheim**

Researcher: Peter Nickel | Andy Lungfiel | Rolf-Jürgen Trabold

Title of Paper/Research: [Reconstruction of Near Misses and Accidents for Analyses from
Virtual Reality Usability Study](#)

Journal: EuroVR 2017: Virtual Reality and Augmented Reality

Date: December, 2017

Indian Institute of Technology Gandhinagar

Department of Electrical Engineering

**University of Montpellier University of
Montpellier**

INRIA Camin team and LIRMM

**Conacyt-Universidad Autonoma de San Luis
Potosi**

AMRI Institute of Neuroscience Kolkata

University at Buffalo

Department of Biomedical Engineering

Tohoku University Sendai

Department of Robotics

Researcher: Deepesh Kumar | Alejandro González | Abhijit Das | Anirban Dutta

Philippe Fraisse | Mitsuhiro Hayashibe | Uttama Lahiri

Title of Paper/Research: [Virtual Reality-Based Center of Mass-Assisted Personalized Balance
Training System](#)

Journal: Frontiers in Bioengineering and Biotechnology 2017; 5: 85.

Date: January, 2018

Indian Institute of Technology Gandhinagar

Department of Electrical Engineering

**All India Institute of Medical Sciences
New Delhi**

Department of Neurology

AMRI Institute of Neurosciences Kolkata

Department of Neurorehabilitation

Researcher: Ashish Dhiman | Dhaval Solanki | Ashu Bhasin | Abhijit Das | Uttama Lahiri

Title of Paper/Research: [An intelligent, adaptive, performance-sensitive, and virtual reality-based gaming platform for the upper limb](#)

Journal: Computer Animation and Virtual Worlds 2018

Date: January, 2018

Villanova University

*Department of Electrical and Computer
Engineering*

Computing Sciences Department

*Department of Astrophysics and Planetary
Science*

Vanderbilt University

Physics & Astronomy Department

Researcher: Edward Harriett | Kyle Conroy | Andrej Prša | Frank Klassner

Title of Paper/Research: [Interfacing modeling suite Physics Of Eclipsing Binaries 2.0 with a Virtual Reality Platform](#)

Journal: American Astronomical Society, AAS Meeting #231, id.#244.07

Date: January, 2018

Brown University Providence

*Department of Cognitive, Linguistic, and
Psychological Sciences*

University of California Santa Barbara

Department of Geography

Researcher: Elizabeth R. Chrastil | William H. Warren

Title of Paper/Research: Rotational error in path integration: encoding and execution errors in angle reproduction

Journal: Experimental Brain Research, June 2017, Volume 235, Issue 6

Date: March, 2017

Institute of Technology Gandhinagar, India

Cognitive Science Department

Researcher: Pradeep Raj K B | Poojan Oza | Uttama Lahiri

Title of Paper/Research: Gaze-sensitive Virtual Reality based Social Communication Platform for Individuals with Autism

Journal: IEEE Transactions on Affective Computing (Volume: PP, Issue: 99)

Date: March, 2017

University of Groningen

*University Medical Center Groningen,
Department of Psychiatry*

**Parnassia Psychiatric Institute The Hague
VU University**

Department of Clinical Psychology

Maastricht University

*Department of Psychiatry and
Neuropsychology*

Researcher: Chris N.W. Geraets | Marijevan Beilen | Roos Pot-Kolder | Jacqueline Counotte Markvan der Gaag | Wim Veling

Title of Paper/Research: Social environments and interpersonal distance regulation in psychosis: A virtual reality study

Journal: Schizophrenia Research, February 2018, Volume 192

Date: April, 2017

**Max Planck Institute for Psycholinguistics
Nijmegen**

Neurobiology of Language Department

Radboud University Nijmegen

*Donders Institute for Brain, Cognition
and Behaviour*

University of Birmingham

School of Psychology

Researcher: Evelien Heyselaar | Peter Hagoort | Katrien Segaert

Title of Paper/Research: [How social opinion influences syntactic processing —
An investigation using virtual reality](#)

Journal: PLoS ONE 12(4): e0174405

Date: April, 2017

University of Muenster

Institute for Psychology

*Otto-Creutzfeldt Center for Cognitive
and Behavioural Neuroscience*

New York University Shanghai

Neural Science Program

The University of Hong Kong

Department of Psychology

Researcher: Diederick C. Niehorster | Li Li | Markus Lappe

Title of Paper/Research: [The Accuracy and Precision of Position and Orientation Tracking in
the HTC Vive Virtual Reality System for Scientific Research](#)

Journal: Iperception. 2017 May-Jun; 8(3)

Date: May, 2017

University of Coimbra

*IBILI – Institute for Biomedical Imaging in
Life Sciences, Faculty of Medicine*

CISUC, Faculty of Sciences and Technology

University Hospital Coimbra

**CIBIT, ICNAS, Brain Imaging Network of
Portugal Coimbra**

Researcher: João Andrade | José Cecílio | Marco Simões | Francisco Sales
Miguel Castelo-Branco

Title of Paper/Research: [Separability of motor imagery of the self from interpretation of
motor intentions of others at the single trial level: an EEG study](#)

Journal: Journal of NeuroEngineering and Rehabilitation 2017

Date: June, 2017

Parnassia Psychiatric Institute The Hague

VU University Amsterdam

Department of Clinical Psychology

University of Groningen

*University Medical Center Groningen,
Department of Vascular Medicine*

GGZ Delfland Delft

Maastricht University

*Department of Psychiatry and
Neuropsychology*

Researcher: Jacqueline Counotte | Roos Pot-Kolder | Arie M. van Roon | Olivier Hoskam
Mark van der Gaag | Wim Veling

Title of Paper/Research: [High psychosis liability is associated with altered autonomic
balance during exposure to Virtual Reality social stressors](#)

Journal: Schizophrenia Research, Volume 184

Date: June, 2017

University College London

Institute of Cognitive Neuroscience

Researcher: Paul A. G. Forbes | Antonia F. de C. Hamilton

Title of Paper/Research: [Moving higher and higher: imitators' movements are sensitive to observed trajectories regardless of action rationality](#)

Journal: Experimental Brain Research, September 2017, Volume 235, Issue 9

Date: June, 2017

Bournemouth University Poole

Department of Psychology

Ageing and Dementia Research Centre

German Centre for Neurodegenerative Diseases Magdeburg

Researcher: Steffen Hartmeyer | Ramona Grzeschik | Thomas Wolbers | Jan M. Wiener

Title of Paper/Research: [The Effects of Attentional Engagement on Route Learning Performance in a Virtual Environment: An Aging Study](#)

Journal: Frontiers in Aging Neuroscience

Date: July, 2017

University of Coimbra

IBILI – Institute for Biomedical Imaging in Life Sciences, Faculty of Medicine

CIBIT, ICNAS, Brain Imaging Network of Portugal

Researcher: Carlos P. Amaral | Marco A. Simões | Susana Mouga | João Andrade Miguel Castelo-Branco

Title of Paper/Research: [A novel Brain Computer Interface for classification of social joint attention in autism and comparison of 3 experimental setups: A feasibility study](#)

Journal: Journal of Neuroscience Methods, Volume 290

Date: October, 2017

**Wayne State University College of Pharmacy
and Health Sciences Detroit**

Department of Pharmacy Practice

Department of Pharmaceutical Sciences

*Department of Psychiatry and Behavioral
Neurosciences*

Researcher: Hilary A. Marusak | Craig A. Peters | Aneesh Hehr | Farrah Elrahal
Christine A. Rabinak

Title of Paper/Research: [A novel paradigm to study interpersonal threat-related learning and extinction in children using virtual reality](#)

Journal: Scientific Reports, volume 7, Article number: 16840(2017)

Date: December, 2017

Indian Institute of Technology Gandhinagar

Department of Electrical Engineering

**All India Institute of Medical Sciences
New Delhi**

Department of Neurology

AMRI Institute of Neurosciences Kolkata

Department of Neurorehabilitation

Researcher: Ashish Dhiman | Dhaval Solanki | Ashu Bhasin | Abhijit Das | Uttama Lahiri

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Date: January, 2018

University College London

Institute of Cognitive Neuroscience

Researcher: Joanna Hale | Madeleine E. M. Payne | Kathryn M. Taylor | Davide Paoletti
Antonia F. De C. Hamilton

Title of Paper/Research: [The virtual maze: A behavioural tool for measuring trust](#)

Journal: The Quarterly Journal of Experimental Psychology Vol. 0, Iss. ja, 2017

Date: January, 2018

York University Toronto

Centre for Vision Research

Researcher: Meaghan McManus | Sarah D'Amour | Laurence R. Harris

Title of Paper/Research: [Using optic flow in the far peripheral field](#)

Journal: Journal of Vision July 2017

Date: July, 2017

University of Southern California Los Angeles

*Department of Mechanical Engineering
Division of Biokinesiology and Physical
Therapy*

Researcher: Aram Kim | Zixuan Zhou | Kari S. Kretch | James M. Finley

Title of Paper/Research: [Manipulating the fidelity of lower extremity visual feedback to identify obstacle negotiation strategies in immersive virtual reality](#)

Journal: 2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)

Date: July, 2017

Ohio University Athens

*College of Health Sciences and Professions,
Division of Physical Therapy*

Researcher: Samuel T. Leitkam | Megan Applegate | James S. Thomas

Title of Paper/Research: [Full-body reaching assessment of Fitts' Law in a virtual environment](#)

Journal: 2017 International Conference on Virtual Rehabilitation (ICVR)

Date: August, 2017

West Virginia University Morgantown

*Department of Human Performance,
School of Medicine
Centers for Neuroscience, School of Medicine
Department of Mechanical and Aerospace
Engineering, Benjamin M. Statler College of
Engineering and Mineral Resources*

Researcher: Erienne V. Olesh | Bradley S. Pollard | Valeriya Gritsenko

Title of Paper/Research: [Gravitational and Dynamic Components of Muscle Torque Underlie Tonic and Phasic Muscle Activity during Goal-Directed Reaching](#)

Journal: Frontiers in Human Neuroscience

Date: September, 2017

University of Southern California

*Division of Biokinesiology and
Physical Therapy*

Researcher: Aram Kim | Zixuan Zhou | Kari S. Kretch | James M. Finley

Title of Paper/Research: [Manipulating the fidelity of lower extremity visual feedback to identify obstacle negotiation strategies in immersive virtual reality](#)

Journal: 2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)

Date: September, 2017

Leibniz Research Centre for Working Environment and Human Factors Dortmund, Germany

Department of Ergonomics

Researcher: Thorsten Plewan | Gerhard Rinkenauer

Title of Paper/Research: [Surprising depth cue captures attention in visual search](#)

Journal: Psychonomic Bulletin & Review

Date: October, 2017

Macquarie University Sydney

*Faculty of Medicine and Health Sciences
Department of Computing*

Researcher: Kathryn Mills | Aula Idris | Thu-An Pham | John Porte | Mark Wiggins
Manolya Kavakli

Title of Paper/Research: [Validity and Reliability of a Virtual Reality Game in Evaluating the Projected Frontal Plane Knee Angle When Landing From a Drop Vertical Jump](#)

Journal: Journal of Sport Rehabilitation

Date: November, 2017

University of North Carolina at Greensboro, Greensboro, NC

Department of Kinesiology

Children's Hospital Medical Center, Cincinnati, OH

Researcher: Chanel LoJacono | Ryan Mac Pherson | Nikita Kuznetsov | Louisa D. Raisbeck
Scott Ross | Chris Rhea

Title of Paper/Research: [Obstacle Crossing in a Virtual Environment Transfers to a Real Environment](#)

Journal: (Ahead of Print) Human Kinetics Journals

Date: November, 2017

University of California Santa Barbara

Department of Geography

Brown University

*Department of Cognitive, Linguistic, and
Psychological Sciences*

Researcher: Elizabeth R. Chrastil | William H. Warren

Title of Paper/Research: [Rotational error in path integration: Encoding and execution errors in angle reproduction](#)

Journal: Experimental Brain Research, June 2017, Volume 235, Issue 6

Date: March, 2107

University of Kent

School of Psychology

University of York

Department of Psychology

University of California Santa Barbara

*Department of Psychological &
Brain Sciences*

Researcher: Mario Weick | Cade McCall | Jim Blascovich

Title of Paper/Research: [Power moves beyond complementarity: A staring look elicits avoidance in low power perceivers and approach in high power perceivers](#)

Journal: Personality and Social Psychology Bulletin

Date: March, 2017

Durham University, Durham, UK

Department of Psychology

Researcher: James Negen | Edward Heywood-Everett | Hannah E. Roome | Marko Nardini

Title of Paper/Research: [Development of allocentric spatial recall from new viewpoints in virtual reality](#)

Journal: Developmental Science, Volume 21, Issue 1

Date: March, 2017

Institute of Technology Gandhinagar, India

Cognitive Science Department

Researcher: Pradeep Raj K B | Poojan Oza | Uttama Lahiri

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Researcher: Richard A. Paris | Timothy P. McNamara | John J. Rieser

Title of Paper/Research: [A comparison of methods for navigation and wayfinding in large virtual environments using walking](#)

Journal: 2017 IEEE Virtual Reality (VR)

Date: March, 2017

University of Guelph

Department of Psychology

Researcher: Michael R. Corbett

Title of Paper/Research: [Examining How Different Methodological Approaches Impact Safety Outcome Effects in Child Pedestrian Research: Comparing Typical and Novel Measurement Approaches in Virtual Reality](#)

Journal: Master Thesis

Date: March, 2017

Ohio State University

*Transportation Research Center Inc,
National Highway Traffic Safety Administration*

Researcher: SeHwan Kim | Junmin Wang | Dennis Guenther | Gary Heydinger | Joshua Every
M. Kamel Salaani | Frank Barickman

Title of Paper/Research: [Analysis of Human Driver Behavior in Highway Cut-in Scenarios](#)

Journal: SAE Technical Paper 2017-01-1402, 2017

Date: March, 2017

University of Groningen

*University Medical Center Groningen,
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Researcher: Chris N.W. Geraets | Marijevan Beilen | Roos Pot-Kolder | Jacqueline Counotte
Markvan der Gaag | Wim Veling

Title of Paper/Research: [Social environments and interpersonal distance regulation in psychosis: A virtual reality study](#)

Journal: Schizophrenia Research, February 2018, Volume 192

Date: April, 2017

Zhejiang University

*Department of Psychology and
Behavioral Sciences*

Swarthmore College

Department of Psychology

Researcher: Li Zhi | Frank H. Durgin

Title of Paper/Research: [A large-scale horizontal-vertical illusion produced with small objects separated in depth](#)

Journal: Journal of Experimental Psychology: Human Perception and Performance, 43(8)

Date: April, 2017

**Max Planck Institute for Psycholinguistics
Nijmegen**

Neurobiology of Language Department

Radboud University Nijmegen

*Donders Institute for Brain, Cognition
and Behaviour*

University of Birmingham

School of Psychology

Researcher: Evelien Heyselaar | Peter Hagoort | Katrien Segaert

Title of Paper/Research: [How social opinion influences syntactic processing —
An investigation using virtual reality](#)

Journal: PLoS ONE 12(4): e0174405

Date: April, 2017

University of Utah

Department of Psychology

Vanderbilt University

School of Engineering

Researcher: Bobby Bodenheimer | Sarah Creem-Regehr | Elena Shemetova

Jeanine Stefanucci | William B. Thompson

Title of Paper/Research: [Prism aftereffects for throwing with a self-avatar in an immersive
virtual environment](#)

Journal: Virtual Reality (VR), 2017 IEEE

Date: April, 2017

Carleton University

School of Information Technology

York University

Department of Psychology

Researcher: Thomas S. Young | Robert J. Teather | I. Scott MacKenzie

Title of Paper/Research: [An arm-mounted inertial controller for 6DOF input: Design and
evaluation](#)

Journal: 2017 IEEE Symposium on 3D User Interfaces (3DUI)

Date: April, 2017

**Max Planck Institute for Psycholinguistics
Nijmegen**

**International Max Planck Research School for
Language Sciences Nijmegen**

Radboud University

*Donders Institute for Brain, Cognition
and Behavior*

Researcher: Johanne Tromp | David Peeters | Antje S. Meyer | Peter Hagoort

Title of Paper/Research: [The combined use of virtual reality and EEG to study language processing in naturalistic environments](#)

Journal: Behavior Research Methods

Date: May, 2017

Washington University St. Louis

*Department of Psychological and Brain
Sciences*

Researcher: Samantha Allison | Denise Head

Title of Paper/Research: [Route repetition and route reversal: Effects of age and encoding method](#)

Journal: Psychology and Aging, 32(3)

Date: May, 2017

University of Muenster

*Institute for Psychology
Otto-Creutzfeldt Center for Cognitive
and Behavioural Neuroscience*

Researcher: Diederick C. Niehorster | Li Li | Markus Lappe

Title of Paper/Research: [The Accuracy and Precision of Position and Orientation Tracking in the HTC Vive Virtual Reality System for Scientific Research](#)

Journal: Iperception. 2017 May-Jun; 8(3)

Date: May, 2017

New York University Shanghai

Neural Science Program

The University of Hong Kong

Department of Psychology

Vanderbilt University Nashville

Department of Psychology

Researcher: Qiliang He | Timothy P. McNamara

Title of Paper/Research: Spatial Updating Strategy Affects the Reference Frame in Path Integration

Journal: Psychonomic Bulletin & Review

Date: May, 2017

University of Ottawa

Université du Québec en Outaouais

Département de psychoéducation et de psychologie

Researcher: Oliver Baus | Stéphane Bouchard

Title of Paper/Research: Exposure to an unpleasant odour increases the sense of Presence in virtual reality

Journal: Virtual Reality, Volume 21, Issue 2

Date: June, 2017

**Max Planck Institute for Psycholinguistics
Nijmegen**

Researcher: David Peeters

Title of Paper/Research: A standardized set of 3-D objects for virtual reality research and applications

Journal: Behavior Research Methods

Date: June, 2017

University of South Wales

School of Psychology and Therapeutic Studies

Oxford Brookes University

Department of Psychology, Social Work and Public Health

University of London

Department of Psychology, Royal Holloway

Researcher: Catherine Purcell | John P. Wann | Kate Wilmut

Title of Paper/Research: The use of visually guided behaviour in children with Developmental Coordination Disorder (DCD) when crossing a virtual road

Journal: Human Movement Science, Volume 53

Date: June, 2017

Parnassia Psychiatric Institute The Hague

VU University Amsterdam

Department of Clinical Psychology

University of Groningen

*University Medical Center Groningen,
Department of Vascular Medicine*

GGZ Delfland Delft

Maastricht University

Department of Psychiatry and Neuropsychology

Researcher: Jacqueline Counotte | Roos Pot-Kolder | Arie M. van Roon | Olivier Hoskam
Mark van der Gaag | Wim Veling

Title of Paper/Research: High psychosis liability is associated with altered autonomic balance during exposure to Virtual Reality social stressors

Journal: Schizophrenia Research, Volume 184

Date: June, 2017

Beijing Normal University

Institute of Developmental Psychology

Oklahoma City University

Department of Psychology

Researcher: Zhenzhen Huang | Qingfen Hu | Yi Shao

Title of Paper/Research: Angles no longer weigh in: The effect of geometric cue directness on reorientation

Journal: Journal of Experimental Psychology: Learning, Memory, and Cognition, Vol 43(7), Jul 2017

Date: July, 2017

Iowa State University Ames

Department of Psychology

Vanderbilt University Nashville

Department of Psychology

Researcher: Lori A. Sjolund | Jonathan W. Kelly | Timothy P. McNamara

Title of Paper/Research: Optimal combination of environmental cues and path integration during navigation

Journal: Memory & Cognition, January 2018, Volume 46, Issue 1

Date: August, 2017

**Max Planck Institute for Psycholinguistics
Nijmegen**

University of Oxford

Radboud University Nijmegen

*Donders Institute for Brain, Cognition,
and Behavior*

Researcher: Nicole Eichert | David Peeters | Peter Hagoort

Title of Paper/Research: Language-driven anticipatory eye movements in virtual reality

Journal: Psychological Research

Date: March, 2016

University of Campania “Luigi Vanvitelli”

*Laboratory of Cognitive Science and
Immersive Virtual Reality, CS-IVR,
Department of Psychology*

Researcher: Tina Lachini | Gennaro Ruggiero | Michela Vinciguerra | Francesco Ruotolo

Title of Paper/Research: [Manipulating time and space: Collision prediction in peripersonal and extrapersonal space](#)

Journal: Cognition, Volume 166

Date: September, 2017

University of Utrecht

Department of Experimental Psychology

ETH Zürich

*Department of Humanities, Social and
Political Sciences*

Researcher: Jascha Grübel | Tyler Thrash | Christoph Hölscher | Victor R. Schinazi

Title of Paper/Research: [Evaluation of a conceptual framework for predicting navigation performance in virtual reality](#)

Journal: PLoS ONE 12(9): e0184682

Date: September, 2017

Iowa State University

Department of Psychology

Researcher: Zachary D. Siegel | Jonathan W. Kelly | Lucia A. Cherep

Title of Paper/Research: [Rescaling of perceived space transfers across virtual environments](#)

Journal: Journal of Experimental Psychology: Human Perception and Performance, Vol 43(10), Oct 2017, 1805-1814

Date: October, 2017

Iowa State University Stange Road

Department of Psychology

Researcher: Jonathan W. Kelly | Lucia A. Cherep | Zachary D. Siegel

Title of Paper/Research: [Perceived Space in the HTC Vive](#)

Journal: ACM Transactions on Applied Perception, Volume 15 Issue 1

Date: November, 2017

University of South Wales Pontypridd

*Faculty of Life Sciences and Education,
School of Psychology and Therapeutic Studies
The Dyscovery Centre*

Researcher: C. Purcell | A.R. Romijn

Title of Paper/Research: [Appropriateness of different pedagogical approaches to road safety education for children with Developmental Coordination Disorder \(DCD\)](#)

Journal: Research in Developmental Disabilities, Volume 70

Date: November, 2017

Stanford University Stanford

*Department of Communication
Department of Psychiatry and Behavioral
Sciences, School of Medicine*

Researcher: Benjamin J. Li | Jeremy N. Bailenson | Adam Pines | Walter J. Greenleaf
Leanne M. Williams

Title of Paper/Research: [A Public Database of Immersive VR Videos with Corresponding Ratings of Arousal, Valence, and Correlations between Head Movements and Self Report Measures](#)

Journal: Frontiers in Psychology 8, 2017

Date: December, 2017

Tsinghua University Beijing

*Department of Psychology,
School of Social Sciences*

Tsinghua University Beijing

*Crossmodal Research Laboratory,
Department of Experimental Psychology*

Researcher: Hui Zhao | Fuxing Huang | Charles Spence | Xiaoang Wan

Title of Paper/Research: [Visual Search for Wines with a Triangle on the Label in a Virtual Store](#)

Journal: Frontiers in Psychology 8, 2017

Date: December, 2017

National Institutes of Health, USA

Clinical Center Nutrition Department

National Human Genome Research Institute, USA

Social and Behavioral Research Branch

Researcher: Susan Persky | Megan R. Goldring | Sara A. Turner | Rachel W. Cohen
William D. Kistler

Title of Paper/Research: [Validity of assessing child feeding with virtual reality](#)

Journal: Appetite, Volume 123

Date: December, 2017

University of Lausanne

*Department of Organizational Behavior,
Business School (HEC)*

University of Applied Sciences Bern

Researcher: Marianne Schmid Mast | Emmanuelle P. Kleinlogel | Benjamin Tur
Manuel Bachmann

Title of Paper/Research: [The future of interpersonal skills development: Immersive virtual reality training with virtual humans](#)

Journal: Human Resource Development Quarterly

Date: January, 2018

North Carolina State University

Center for Geospatial Analytics

College of Design

Department of Sociology and Anthropology

Center for Geospatial Analytics

Researcher: Payam Tabrizian | Perver K. Baran | William R. Smith | Ross K. Meentemeyer

Title of Paper/Research: [Exploring perceived restoration potential of urban green enclosure through immersive virtual environments](#)

Journal: Human Resource Development Quarterly

Date: January, 2018

Southwest University Chongqing

*Key Laboratory of Personality and Cognition,
Faculty of Psychological Science*

Leiden University Leiden

*Cognitive Psychology Unit, Institute for
Psychological Research and Leiden Institut
for Brain and Cognition*

Researcher: Ke Ma | Bernhard Hommel

Title of Paper/Research: [Metacontrol and body ownership: divergent thinking increases the virtual hand illusion](#)

Journal: Psychological Research

Date: January, 2018

Southwest University Chongqing

*Key Laboratory of Personality and Cognition,
Faculty of Psychological Science*

Leiden University

*Institute for Psychological Research & Leiden
Institute for Brain and Cognition*

Researcher: Ke Ma | Bernhard Hommel | Hong Chen

Title of Paper/Research: [The roles of consistency and exclusivity in perceiving body ownership and agency](#)

Journal: Human Resource Development Quarterly

Date: January, 2018

University of Liverpool

School of Psychology

University of Sheffield

Department of Psychology

University College London

*Department of Psychology and Human
Development, UCL Institute of Education*

University of Lille

*Psychologie : Interactions, Temps,
Emotions, Cognition*

Researcher: Jamie Lingwood | Mark Blades | Emily K. Farran | Yannick Courbois
Danielle Matthews

Title of Paper/Research: [Using virtual environments to investigate wayfinding in 8- to 12-year-olds and adults](#)

Journal: Journal of Experimental Child Psychology, Volume 166

Date: February, 2018

WorldViz is the industry leader in immersion-ready virtual reality (VR) solutions. WorldViz's patent-pending interactive visualization and simulation technologies are deployed across 1500+ Fortune 500 companies, academic institutions and government agencies.

WorldViz's core products are [Vizard](#), the premier development platform for professional VR application design, and [VizMove](#), the world's only enterprise-class VR software and hardware solution. WorldViz also offers [PPT](#), a high-precision wide-area motion tracking system, as well as professional consulting and content creation services.

The newest WorldViz product is [Vizable](#), a simple yet powerful VR creation and collaboration tool that has plugins for eye-tracking, hand-tracking, biofeedback measurements, and more. Vizable lets researchers rapidly create social VR environments and conduct a wide array of research with precision.

WorldViz technology enables users to replace physical processes with immersive virtual methods. Applications range from design visualization and industrial training to interactive education and scientific research.



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