

# ICDVRAT-ITAG 2018 Conference Programme

Tuesday 4<sup>th</sup> September 2018 – Day One

09:00	Registration Opens	
09:15	Conference Open and Welcome	
	Plenary Session I: <i>Serious Games for Education</i>	
9:45	Pervasive Game Design to Evaluate Social Interaction Effects on Levels of Physical Activity Among Older Adults	Luciano Santos, Kazuya Okamoto, Shusuke Hiragi, Goshiro Yamamoto, Osamu Sugiyama, Tomoki Aoyama and Tomohiro Kuroda
	Moe the Monkey: A Fun Way to Educate Children	Ikram Asghar, Oche A Egaji, David Hinton and Mark Griffiths
	State Diagram for Affective Learning in an Educational Platform	Mohammad Taheri, David Brown, Penny Standen, Nasser Sherkat, Georgina Cosma and Caroline Langensiepen
	Why are Educational Robots Not Being Used in Special Education Schools Despite Proof That They are Beneficial for Their Students?	Maria Jose Galvez Trigo, Penny Standen and Sue Cobb
10:45	Refreshment Break	
11:15	Keynote Presentation I : NICER User Group	
	Plenary Session II: <i>End User Involvement in Research</i>	
11:45	End-user involvement in Rehabilitation Virtual Reality Implementation Research: Benefits, Challenges, and Lessons Learned	Rachel Proffitt, Stephanie Glegg, Danielle Levac and Belinda Lange
	User-centred Design of an Active Computer Gaming System for Strength and Balance Exercises in Older Adults	Sarah Howes, Darryl Charles, Katy Pedlow, Iseult Wilson, Dominic Holmes, Geoffrey Chaponneau and Suzanne McDonough
12:30	Lunch Break (1 Hour)	
	Plenary Session III : <i>Exposure Therapy</i>	
13:30	iSenseVR - Toward A Low-Cost Virtual Reality Solution for Exposure Therapy in Busy Environments	Matthieu Poyade, Glyn Morris, Ian Taylor and Victor Portela
	An Exploratory Investigation Into The Potential Of Mobile Virtual Reality For The Treatment Of Paruresis – A Social Anxiety Disorder.	James Lewis, David Brown and Agni Paul
	Gradual And Shared Immersion In Virtual Reality Exposure Therapy	David Roberts, Alan Barrett and Alexandrous Landowska
	Short Paper Presentations A: <i>Memory and Cognition</i>	
14:15	Validity of the Internet-based Bill-Paying Task for assessing executive functions in adults with traumatic brain injury	Yael Nadler Tzadok, Rotem Eliav, Sigal Portnoy and Debbie Rand
	Open world memory game	Tibor Guzsvinecz, Balázs Ruzsonyi, Veronika Szűcs and Cecilia Sik Lanyi
	User Involvement in Virtual Reality Treatment Groups	Merve Dilgul
	Is It Necessary To Show Virtual Limbs In Action Observation Neurorehabilitation Systems?	Cristián Modroño, Sergi Bermúdez, Mónica Cameirão, Fábio Pereira, Teresa Paulino, Francisco Marciano-Serrano, Estefanía Hernández-Martín, Julio Plata-Bello, Nereida Palenzuela-Trujillo, Daniel Núñez-Padrón, José María Pérez-González and José Luis González-Mora
	The Feasibility And Initial Effectiveness Of TECH To Improve Cognition: Tablet Enhancement Of Cognition And Health Intervention	Noa Givon Schaham, Noam Donda, Hila Vitek, Inbal Elbo Golan, Zvi Buckman and Debbie Rand
	Virtual Shopping: Acceptance Of Immersive Virtual Reality In Diagnostic Of Memory Deficit In Elderly	Adéla Plechatá, Václav Sahula and Iveta Fajnerová
	Cognitive Impact Evaluation of Multimodal Interfaces for People with Visual Disabilities	Lana Mesquita, Jaime Sánchez and Rossana Andrade
	Design, Development, And Evaluation Of A Novel Mindfulness-Supporting VR Device	Luisa Procházková, Anna Francová, Barbora Šouláková, Nestor Caro, Iveta Fajnerová and Bernhard Hommel

	Literature Review And Design Concept To Read Bio-Data From Wearable Assistive Device And Synchronising It With Music To Support People Living With Dementia	<i>Fehmida Mohamedali, Nasser Matorian and Elahi Kani-Zabihi</i>
	Towards Effective Cognitive Rehabilitation in Embodied Virtual Reality: Designing for Executive Dysfunction	<i>Zack Lyons, Nigel Harris and Leon Watts</i>
15:00	<b>Refreshment Break</b>	
	<b>Short Paper Presentations B: Rehabilitation and Posture</b>	
15:15	Similarities Between Locomotion In Virtual And Real Environments: Implications For Rehabilitation	<i>Michal Kafri, Patrice L Weiss, Gabi Zeilig, Moshe Bondi and Rachel Kizony</i>
	Reflections On The Design And Development Of A Virtual Reality Mirror Therapy System For Upper Limb Stroke Rehabilitation	<i>Joseph McKinney, Darryl Charles, Suzanne McDonough, Philip Morrow, Niamh Kennedy and Dominic Holmes</i>
	The Effect Of Visual Feedback On Performance Of The Star Excursion Balance Test	<i>Yi Wan, Jennifer L Davies, Kate Button and Mohammad Al-Amri</i>
	Vestibular Rehabilitation Comparing Virtual Reality Therapy With Traditional Vestibular Physical Therapy	<i>Pinata Sessoms, Kathrine Haluch, Dawn Bodell, Amanda Markham and Kimberly Gottshall</i>
	Virtual Reality Reaching Exercise To Predict Upper Limb Motor Impairment	<i>Diar Karim, Jack Evans, Sang-Hoon Yeo, Alan Wing and Chris Miall</i>
	Tele-Rehabilitation For Stroke Survivors Pages (Pre-Action Games & Exercises)	<i>Vince Macri, Paul Zilber, Douglas Simons and James Merrill</i>
	The Role Of Social Interactions In A Multiplayer Context For Rehabilitation Games	<i>Matthew Whitby, Peter Howell, Tom Garner and Coen De Weerd</i>
	Reducing Clinical Subjective Discrepancies In Evaluation Of Clinical Technology Using Objective Measures	<i>Joe Sarsfield, David Brown, Caroline Langensiepen, Nasser Sherkat, James Lewis and Penny Standen</i>
	Towards Valence Detection From EMG For Virtual Reality Applications	<i>Ifigenia Mavridou, Ellen Seiss, Mahyar Hamedí, Emili Balaguer-Ballester and Charles Nduka</i>
	Mobile Biofeedback Low Cost Therapy Systems For Home, Outpatient And Institutional Rehabilitation Care	<i>Jakub Petioky, Marketa Janatova, Karel Hana, Kristyna Hoidekrova and Andrea Velebna</i>
	<b>Plenary Session IV: Stroke/TBI</b>	
16:00	A Low-Cost Kinect For Windows V2-Based Spatiotemporal Gait Analysis System. Efficacy Study With Healthy Subjects And Individuals With Stroke	<i>Jorge Latorre, Carolina Colomer, Mariano Alcañiz and Roberto Llorens</i>
	Exploring Materials And Object Properties In An Interactive Tangible System For Upper Limb Rehabilitation	<i>Fábio Pereira, Sergi Bermúdez I Badia, Rúben Ornelas and Mónica Cameirão</i>
	Traumatic Brain Injury With Comorbid Post Traumatic Stress Disorder Affects Performance On Virtual Reality-Based Balance Tasks	<i>Marie Onakomaiya, Marcy Pape, Tricia Kwiatkowski, Douglas Brungart and Sarah Kruger</i>
	Concurrent Virtual Rehabilitation Of Service Members Post-Acquired Brain Injury – A Randomized Clinical Study	<i>Grigore Burdea Phd, Kevin Polistico, Namrata Grampurohit Phd Ot, Gregory H, Nam H. Kim Phd, Michelle Nordstrom Ot, Kiara B, Justin Murphy and Paul Pasquina Md</i>
17:00	<b>Networking, viewing demo stands and posters</b>	
17:30	<b>End of Day One</b>	
18:00	<b>Drinks Reception: Senate Chamber, Trent Building University of Nottingham</b>	
	<p><b>Drinks Reception to include lite bites with Real Ale:</b> A chance to sample a selection of local products to include: Red Leicester and Stilton, Melton Mowbray Pork Pie, Lincolnshire Sausage Rolls with Bramley Apple Chutney. Served with half a pint of Legend Ale from <a href="http://www.nottinghambrewery.co.uk">Nottingham Brewery</a>.</p> <p>We are delighted to invite Professor Anne James Head of Computing and Technology at Nottingham Trent University and Dame Jessica Corner, Pro Vice Chancellor (Research and Knowledge Exchange) at the University of Nottingham to give a Welcome Address.</p>	

## Wednesday 5<sup>th</sup> September 2018 - Day Two

<b>08:45</b>	<b>Registration/Information Desk Opens</b>	
<b>09:00</b>	<b>Start of Day Two: announcements</b>	
	<b>Plenary Session V Cognitive impairment</b>	
<b>09:15</b>	<b>Strengthening Social-Emotional Skills For Individuals With Developmental Disabilities Through Virtual Reality Games</b>	Tiffany Thang, Priya Bhattacharjee, Shirley Huang and Sri Kurniawan
	<b>High-Functioning Autistic Children Programming Robotic Behaviour</b>	Orly Lahav, Vadim Talis, Ravit Shelkovitz and Rona Horen
	<b>Objective Assessment Of The Effect Of Blue-Tinted Spectacles On L-Dopa Induced Dyskinesia In A Patient With Parkinson's Disease.</b>	Francesco Berti, Sarmad Aslam, Fiona Lindop and Rob Skelly
	<b>Virtual Cubes In 3D Or 2D For Persons With Parkinson's Disease?</b>	Imre Cikajlo, Dejana Zajc, Alma Hukić, Mateja Vesel, Irena Dolinšek and Karmen Peterlin Potisk
<b>10:15</b>	<b>Refreshment Break</b>	
	<b>Plenary Session VI: Technology for Rehabilitation</b>	
<b>11:00</b>	<b>Augmented Rotations In Virtual Reality For Users With A Reduced Range Of Head Movement</b>	Nahal Norouzi, Luke Bölling, Gerd Bruder and Greg Welch
	<b>Providing A Means Of Pre-Planning For Real Spaces For The Visually Impaired Using Updated Navigation Techniques In Virtual Reality: A System And Experiment Proposal</b>	Thomas Hughes-Roberts, Steven Battersby and David Brown
	<b>F.R.A.M.E. (Facial Remote Activity Monitoring Eyewear) - Real-Time Patient Feedback Through Facial Expression Utilising Wearable Technology.</b>	Philip Breedon, Paul Watts, Simon Clarke, Graeme Cox and Charles Nduka
	<b>Towards Transformative VR Meditation: Synthesizing Nirvana Naturally</b>	Henry Moller, Lee Saynor Saynor and Mark Chignell
<b>12:00</b>	<b>Lunch (ISVR Board Meeting)</b>	
<b>13:15</b>	<b>Workshop: Bonnie Connor</b>	
	<b>Short Paper Presentations C User experience</b>	
<b>14:15</b>	<b>Qualitative Research Of An Innovative Virtual Reality Embodiment System: The Machine To Be Another</b>	Sara Ventura, Ausias Cebolla, Rocio Herrero and Rosa Maria Baños
	<b>Using Decision Theory For Analyzing Enrollment In A Scientific Study In The Health Area</b>	Fábio Pereira and Eduardo Fermé
	<b>Plausibility And Weight Classification Of 3D Avatars From Egocentric And Allocentric Perspectives. A Preliminary Study In Healthy Women</b>	Sara Fonseca-Baeza, Adrian Borrego Gonzalez, Marta Miragall, Roberto Llorens and Rosa Baños
	<b>Obesity Prevention Platform For The Promotion Of Healthy Eating Habits And Physical Activity.</b>	Georgina Cardenas-Lopez, Emmanuel Castillo-Gómez and Demián Altamirano-Acosta
	<b>Development Of Colour Vision Test Game For Android Devices</b>	Veronika Szücs, Tibor Guzsvinecz, Daniel Bor and Cecilia Sik-Lanyi
	<b>A New Generation Of The Computerized Visual Spatial Search Task (VISSTA) As An Authoring tool For Rehabilitation Assessment And Intervention</b>	Samir Sangani, Asnat Bar-Haim Erez, Noomi Katz, Joyce Fung, Einat Kodesh and Racheli Kizony
	<b>Designing For The Deaf: The Potential Of Technology Supported Social Skills Training Interventions For D/Deaf And Hard Of Hearing Students</b>	Zoe Platt-Young, Bahareh Shahri, Zoe Hector, Dean Sutherland and Simon Hoermann
	<b>Can Hendy's 4cs Model Help Engaging Learning-Disabled Students?</b>	Mohamed Hendy
	<b>Towards A Diagnostic Internet Of Medical Things: Sensor-Based Data For Sensory Deficits In Children With Autism</b>	William Farr and Ian Male

	<b>Caregiver Involvement Makes The Difference Between Repetitive Behaviours And Engaged Learning In A Computer-Assisted Therapy For Autism</b>	<i>Rosie Deane and Matthew Belmonte</i>
	<b>Creating Personae For Personalising A Visual Programming Tool For Children With Autism Spectrum Condition: A Proposed Methodology</b>	<i>Misbahu Zubair, David Brown, Thomas Hughes-Roberts and Matthew Bates</i>
	<b>Towards A Framework For Implementation Of Virtual Reality Technologies In Schools For Autistic Pupils</b>	<i>Nigel Newbutt and Sue Cobb</i>
<b>15:20</b>	<b>Refreshments</b>	
<b>15:45</b>	<b>Plenary Session VII: <i>Healthcare Applications</i></b>	
	<b>Utilising Object Tracking For The Performance Analysis Of Difficult Airway Equipment - A Shape Retention Testing System (Srts)</b>	<i>Francesco Siena, Philip Breedon, James Armstrong, Paul Watts, Kristofor Inkpin, Andrew Norris and Phillipa Marsh</i>
	<b>Meaningful Change: Defining The Interpretability Of Changes In Endpoints Derived From Interactive And Mhealth Technologies In Healthcare And Clinical Research</b>	<i>Bill Byrom, Philip Breedon, Rauha Tulkki-Wilke and Jill Platko</i>
	<b>A User-Centred Design Approach To The Development And Evaluation Of A Mobile App As A Communication Aid For Deaf People Of Cyprus</b>	<i>Katerina Pieri and Sue Cobb</i>
<b>16:30</b>	<b>End of Day Two</b>	
<b>18:00</b>	<b>Conference Dinner: Murder Mystery Evening at the <a href="#">National Justice Museum</a>, Nottingham</b>	
	<p>You will be transported back to the Victorian era and play sleuth. The evening will begin in the magnificent Grand Jury Room, historically used by deliberating jury members. You will hear about the case of the evening before being set on your way down to the murkiest depths of the prison below to collect clues and speak to the suspects. The evening includes a sumptuous 3 course hot meal and culminates with a shocking revelation of 'whodunnit?!'</p>	

## Thursday 6<sup>th</sup> September - Day Three

<b>08:45</b>	<b>Information Desk Opens</b>
<b>09:00</b>	<b>Start of Day Three</b>
<b>09:05</b>	<b>Hackathon Feedback</b>
<b>10:00</b>	<b>Refreshment</b>
<b>10:30</b>	<b>ISVR AGM</b>
<b>11:00</b>	<b>Best Paper Awards and Prize Giving</b> <b>Prizes for:</b> <b>Best Student Papers Full and Short: Sponsored by Greg Burdea and Bright Cloud</b> <b>Best Paper Full and Short: sponsored by ISVR</b>
<b>11:30</b>	<b>Keynote II - Skip Rizzo: Director for Medical Virtual Reality Institute for Creative Technologies</b>
<b>12:30</b>	<b>Lunch</b>
<b>13:30</b>	<b>Official Close of ICDVRAT Conference</b>