Poster Session

12:30—13:45, The Oculus Building, Atrium

Poster A

Irene Mittelberg[1], Bela Brenger[1], & Christian Beeks[2]
[1]Human Technology Centre (HumTec), RWTH Aachen University, Germany
[2]Data Management and Analytics, University of Münster, Germany
"Towards digitized gesture analytics. Gaining new insights into gesture and gesture space use through motion-capture technology"

Poster B

Jan de Wit, Bram Willemsen, Mirjam de Haas, Pieter Wolfert, Paul Vogt, & Emiel Krahmer
Tilburg center for Cognition and Communication (TiCC), Tilburg University, The Netherlands
"Playful exploration of a robot's gesture production and recognition abilities"

Poster C

Diar Karim, Ermano Arruda, Michael Matthew, & Saif Sidhik
Obi Robotics Ltd.
"Obi Reach"

Poster D

Omar Khan[1], Imran Ahmed[2], Mussab Rahhal[3], Theodoros N. Arvanitis[1], & Mark T. Elliott[1]
[1]Institute of Digital Healthcare, WMG, University of Warwick, UK
[2]University Hospitals Coventry and Warwickshire, UK
[3]School of Engineering, University of Warwick, UK
"Step in time: exploration of asynchrony and timing correction in response to virtual reality avatars for gait re-training"
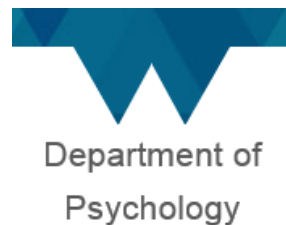
Workshop: Gesture & Technology

Department of Psychology

Sunday the 3rd of June 2018

The Oculus Building, Room 0.04

University of Warwick

WARWICK

EPS
Experimental Psychology Society

INSTITUTE OF ADVANCED STUDY

Department of Psychology

Word of Welcome

Over the past decade, technologies such as motion trackers (e.g., Kinect, Leap Motion) and mixed reality headsets (e.g., HoloLens) have become increasingly accessible and affordable. However, such technologies have yet to be introduced in gesture studies, and gesture studies are often neglected in the development of applications for these technologies.

Our "Gesture & Technology" workshop brings together experts from various disciplines who develop and work with advanced technologies to start the discussion of how such existing technologies could advance gesture studies, and how gesture studies can contribute to the development of useful applications. One could think of a body tracking system for patient monitoring to improve healthcare, or immersive learning experiences with augmented reality and gesture control for education.

Five sessions will examine the themes of: 1) Traditional Technologies Used in Gesture Studies; 2) Nonverbal Communication in Robots and Virtual Agents; 3) Automated Gesture Recognition; 4) Human Computer Interactions in Multisensory Simulations; and 5) Clinical Applications for Body and Motion Trackers.

We look forward to discussing with you how existing technologies could facilitate research excellence in the field of gesture studies, and how theories from gesture studies could lead to exciting and innovative applications. In between the sessions, we will be live tweeting about the workshop using **#Gesture18**. Please join us in the online and offline discussion of the programme.

The Organisers

Dr Suzanne Aussems
Early Career Research Fellow

🐦 @SuzanneAussems

Professor Sotaro Kita
Editor in Chief of *GESTURE*

🐦 @SotaroKita

Workshop Programme

09:00 – 09:45 | Arrival, Registration & Refreshments

09:45 – 10:00 | Word of Welcome

10:00 – 10:30 | Session 1: Plenary

Sotaro Kita, Department of Psychology, University of Warwick, UK
"Traditional technologies used in gesture studies"

10:30 – 11:00 | Coffee Break

11:00 – 12:30 | Session 2: Nonverbal Communication in Robots and Virtual Agents

Stefan Kopp, CITEC, Bielefeld University, Germany
"Getting pragmatic — functions and effects of gesture in HRI"
Abi Roper, City, University of London, UK
"Vision-based gesture recognition technology supports gesture learning in severe aphasia"

12:30 – 13:45 | Lunch Break & Poster Session

13:45 – 14:45 | Session 3: Automated Gesture Recognition

Juliane Honisch, University of Reading, UK
"Does moving along to the same beat increase gesture production and turn-taking efficiency?"
James Trujillo, Donders Institute for Brain, Cognition and Behaviour, NL
"Microsoft Kinect for markerless motion capture: supporting gesture coding and kinematic feature analysis"

14:45 – 15:00 | Short Break

15:00 – 16:00 | Session 4: Technology Demonstrations

Ali Asadipour, WMG, University of Warwick, UK
"Human computer interactions in multisensory simulations"
Demonstrations: Hands-on experience with motion tracking systems

16:00 – 16:50 | Session 5: Clinical Applications for Body and Motion Trackers

Judith Bek[1], Emma Gowen[1], Stefan Vogt[2], Trevor Crawford[2], & Ellen Poliakoff[1]
[1]University of Manchester, [2]Lancaster University, UK
"Motion and eye tracking to investigate imitation of hand movements in Parkinson's disease"
Callum Thornton, School of Engineering, University of Warwick, UK
"Modelling and analysis of hand motion in everyday activities with application to prosthetic hand technology"

16:50 – 17:50 | Closing Remarks & Drinks Reception