

Preface to the International Workshop on Cross-Reality (XR) Interaction 2020



Figure 1: Cross reality interaction - Transitioning on the reality-virtuality continuum or collaborating over various reality-virtuality systems. Courtesy of Pexels from Pixabay.

We have organised the first international workshop on Cross-Reality (XR) Interaction. XR describes the transition between or concurrent usage of multiple systems on the reality-virtuality continuum. While some expect the distinctions between Augmented Reality (AR) and Virtual Reality (VR) to fade away in time, it is still helpful to see them positioned in a Milgram's Reality-Virtuality continuum of 'realities' with various degrees of virtual content. Being a continuum, it is possible to envision (i) a smooth transition between systems using different degrees of virtuality or (ii) collaboration between users using different systems with different degrees of virtuality. This workshop brought together over 30 researchers and practitioners that are interested in XR

to identify current issues and future directions of research. The long-term goal is to create a strong interdisciplinary research community and foster future development of the discipline and collaborations.

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KEYNOTE: DR ANASOL PEÑA-RIOS

Anasol Peña-Rios is a Senior Researcher at BT Research Labs in Adastral Park, Ipswich, where she specialises on AI and Immersive Technologies (VR/AR/MR). In addition, she is a Visiting Fellow at the University of Essex (UK), from where she holds a PhD in Computer Science and an MSc in Advanced Web Engineering. Previously, she completed a BEng in Information Technology at the Instituto Politécnico Nacional (Mexico).

Anasol has been personally driving the agenda on exploring the use of AI, digital twins and immersive technologies

in the context of BT's field force operations. Her work contributed to BT's portfolio who was presented with a Global Telecoms Business Innovation Award (2017), and an IEEE Outstanding Organisation Award (2017). In addition, her project was highly commended at the IET Innovation Awards 2018. She was awarded Best KTP Associate 2016 by the University of Essex Research and Enterprise office and was short-listed for the Computing Women in IT Excellence Awards 2018.

Anasol is an IEEE Senior Member, Board Member and co-founder of the Immersive Learning Research Network, and Board Member of the Creative Science Foundation. She serves as Associate Editor of EAI Endorsed Transactions on e-Learning and as a Review Editor of Frontiers' Human-Media Interaction theme. Her other professional contributions include numerous peer-reviewed publications and editorial work, in addition, to serve as chair and co-organiser of numerous academic conferences. She has more than 15 years' professional experience in industry, working in close collaboration with international multidisciplinary teams.

ADDITIONAL WORKSHOP INFORMATION

Additional information with video presentations and conversations around each individual paper can be found on the workshop's website <https://xr.famnit.upr.si/>.