Invited Presentation: Mónica Cameirão Recipient of the 2016 ISVR Early Career Investigator Award

Insights from 10 years of stroke virtual rehabilitation - a personal perspective

Mónica Cameirão

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BIO-SKETCH

Mónica is an Invited Assistant Professor and researcher at the University of Madeira (UMa) and the Madeira Interactive Technologies Institute (Madeira-ITI) in Portugal. Mónica holds a PhD in ICT from the Universitat Pompeu Fabra (Spain) and a MSc in Applied Physics from the Universidade de Aveiro (Portugal). She is currently the Portuguese coordinator of the Professional Masters on Human-Computer Interaction program that UMa/Madeira-ITI offers in conjunction with Carnegie Mellon University in Pittsburgh, USA. In the past she worked as research assistant at the SPECS Laboratory of the Universitat Pompeu Fabra and at the Institute of Neuroinformatics, ETH-Zürich, Switzerland; and was visiting scholar at the Quality of Life Technologies center of Carnegie Mellon University.

Since Mónica arrived in Madeira in 2011, she has been co-principal investigator and co-founder of the NeuroRehabLab Research Group, a research group created in the context of the Madeira-ITI with over 15 members, including PhD students, technicians, MSc students and other faculty members. The NeuroRehabLab is an interdisciplinary research group that investigates at the intersection of technology, neuroscience and clinical practice to find novel solutions to increase the quality of life of those with special needs.

In recent years, Mónica has been involved in the development and clinical assessment of virtual reality technologies for stroke rehabilitation and her work gave rise to a number of high impact publications in journals such as Stroke, Restorative Neurology and Neuroscience, and the Journal of Neuroengineering and Rehabilitation. Mónica's work in VR explores specific brain mechanisms that relate to functional recovery to approach motor and cognitive stroke rehabilitation by means of non-invasive and low-cost technologies. Her research addresses aspects such as serious gaming, personalization of training, integrative motor-cognitive tasks, physiological computing or the emotional content of training stimuli. More recently, Mónica also started applying these principles to technology mediated fitness training for the elderly population.