

Du 07 JUIL.

14h00

LISN Site Belvédère

IAH, SÉMINAIRES

Virtual Reality Forest Bathing: Beyond Optimal Stress Reduction

Orateur : Francisco Ortega

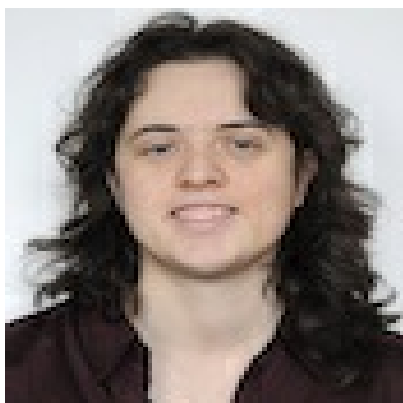
AJOUTER À MON CALENDRIER

Forest bathing is practice of sensory immersion in a nature environment for stress relief and mental resource restoration. Forest bathing offers many positive effects that can help people's mental health; however, many people who are in the most need of stress reduction benefits do not have access to nature, such as people in hospitals, nursing homes, and large cities. Virtual reality (VR) has the potential to increase accessibility to the benefits of nature by delivering immersive nature simulations that provide similar benefits. To create an effective virtual nature environment (VNE), research needs to be conducted on the components of a nature environment that make forest bathing effective. Additionally, a key issue with creating VNE's is making them deployable on accessible, everyday VR headsets like the Oculus Quest 2. This talk will discuss the results from our experiments showing the potential of biomass, or living green nature, as an essential component for restorative effect. I will also include current findings and what's to come!

Biography

Francisco R. Ortega is an Associate Professor at Colorado State University (CSU) and has been Director of the Natural User Interaction Lab (NUILAB) since Fall 2018. Dr. Ortega earned his Ph.D. in Computer Science (CS) with a focus on Human-Computer Interaction (HCI) and 3D User Interfaces (3DUI) from Florida International University (FIU). He also held the Postdoctoral and visiting assistant professor positions at FIU between February 2015 and July 2018. His research has focused on (1) multimodal and unimodal interaction (gesture-centric), which includes gesture elicitation (e.g., a form of participatory design), (2) information access effort in augmented reality (e.g., visual cues and automation bias), (3) AR notifications, and (4) stress reduction using virtual reality forest bathing. For multimodal interaction research, Dr. Ortega focuses on enhancing user interaction through (a) multimodal elicitation, (b) developing interactive techniques, and (c) refining augmented reality visualization techniques. The primary domains for interaction include general environments, immersive analytics, and VR sketching. His research has resulted in over 90 peer-reviewed publications, including books, journals, conferences, workshops, and magazine articles, in venues such as ACM CHI, ACM VRST, IEEE VR, IEEE TVCG, IEEE ISMAR, ACM PACMHCI, ACM ISS, ACM SUI, IEEE 3DUI, HFES, and Human Factor Journals, among others. Dr. Ortega has experience with multiple government-funded projects. For example, Dr. Ortega served as a co-Principal Investigator for the DARPA Communicating with Computers project. He is a principal investigator (PI) for a 3-year effort funded by ONR, titled "Perceptual/Cognitive Aspects of Augmented Reality: Experimental Research and a Computational Model." He was recently awarded a new ONR grant titled "Assessing Cognitive Load and Managing Extraneous Load to Optimize Training." The National Science Foundation and other agencies and companies have also funded him. This includes the NSF CAREER 2023 for microgestures and multimodal interaction. Since his tenure-track appointment at CSU in August 2018, Dr. Ortega has brought over 4.2 million dollars in external funding (with 3.7 million as principal investigator).

His lab website is <https://nuilab.org>



INTERACTION AVEC L'HUMAIN

VENISE

Bouchara Tifanie

Maîtresse de conférences

Responsable de VENISE

0169155525

Courriel

Page personnelle



LABORATOIRE INTERDISCIPLINAIRE
DES SCIENCES DU NUMÉRIQUE

LABORATOIRE INTERDISCIPLINAIRE DES SCIENCES DU NUMÉRIQUE

Site Belvédère : Campus Universitaire bât.507 - Rue du Belvédère
91405 - Orsay

Site Plaine : 1 Rue Raimond Castaing et Rue René Thom (Bât Digitéo)
91190 - Gif-sur-Yvette