



Maurício Sousa

web.ist.utl.pt/antonio.sousa • antonio.sousa@ist.utl.pt

PERSONAL INFORMATION

Nationality Portuguese
Telephone (+351) 917935619
Google Scholar [Link](#)
ORCID 0000-0003-1438-2882

SHORT BIO

I'm a Ph.D. candidate and a research assistant at the [Visualization and Intelligent Multimodal Interfaces Group \(VIMMI\)](#) under the supervision of [Professor Joaquim Jorge](#). In my research, I have been designing novel interaction techniques for the engineering, architecture and medical fields, focussing on computer supported remote collaborative work in Mixed Reality environments. I also have experience in 3D user interfaces, interactive spaces, touch and mid-air gestures. And I have been fortunate to see my research published in top international conferences and journals, such as ACM CHI, ACM ISS, ACM IUI, ACM VRST, INTERACT, IJHCS, and IEEE TVCG.

INTERESTS

Human-Computer Interaction, 3D User Interfaces, collocated and remote collaboration using multiple interactive surfaces, holograms, and Mixed Reality.

EDUCATION

INSTITUTO SUPERIOR TÉCNICO
2015 - Present: Ph.D. Program in Computer Science and Engineering
2012 - 2014: MSc in Information Systems and Computer Engineering
2005 - 2012: BSc in Information Systems and Computer Engineering

SELECTED PUBLICATIONS

Magic Carpet: Interaction Fidelity for Flying in VR, Daniel Medeiros, Maurício Sousa, Alberto Raposo, and Joaquim Jorge, IEEE Transactions on Visualization and Computer Graphics (TVCG), 2019

WARPING DEIXIS: Distorting Gestures to Enhance Collaboration, Maurício Sousa, Rafael Kuffner Dos Anjos, Daniel Mendes, Mark Billinghurst, and Joaquim Jorge, ACM Conference on Human Factors in Computing Systems (CHI), 2019

Using Custom Transformation Axes for Mid-Air Manipulation of 3D Virtual Objects, Daniel Mendes, Maurício Sousa, Rodrigo Lorena, Alfredo Ferreira, and Joaquim Jorge, ACM Symposium on Virtual Reality Software and Technology (VRST), 2017

Creepy Tracker Toolkit for Context-aware Interfaces, Maurício Sousa, Daniel Mendes, Rafael Kuffner dos Anjos, Daniel Medeiros, Alberto Raposo, Alfredo Ferreira, João Pereira, and Joaquim Jorge, ACM Interactive Surfaces and Spaces (ISS), 2017

VRRRRRoom: Virtual Reality for Radiologists in the Reading Room, Maurício Sousa, Daniel Mendes, Soraia Paulo, Nuno Matela, Joaquim Jorge, and Daniel Simões Lopes, ACM Conference on Human Factors in Computing Systems (CHI), 2017

Design and evaluation of a novel out-of-reach selection technique for VR using iterative refinement, Daniel Mendes, Daniel Medeiros, Maurício Sousa, Eduardo Cordeiro, Alfredo Ferreira, and Joaquim Jorge, Elsevier Computers & Graphics, 2017

EXPERIENCE

• CHAMPALIMAUD CENTER FOR THE UNKNOWN

RESEARCH • 2018- Present
Researching, designing and evaluating novel mixed reality interaction techniques for minimally invasive laparoscopic surgery.

• INESC-ID, VISUALIZATION AND INTELLIGENT MULTIMODAL INTERFACES GROUP (VIMMI)

RESEARCH • 2012 - Present
Researching, designing and evaluating novel interaction techniques in 3D user interfaces for collocated and remote collaboration using head-mounted displays, walls, tabletops, mobiles, large scale displays, and wearables. I also help maintaining VIMMI's [media lab](#).

• INSTITUTO SUPERIOR TÉCNICO, UNIVERSITY OF LISBON

Department of Computer Science and Engineering

TEACHING ASSISTANT • 2nd Semester, 2017/18

Human-Computer Interaction

ACADEMIC SERVICE

Peer Reviewer:

ACM DIS: 2016 • IEEE CEMAG: 2016 • ACM ISS: 2016, 2017, 2018 • IEEE ISMAR: 2017, 2018, 2019 • ACM VRST: 2017, 2018 • ACM SUI: 2017 • ACM CHI: 2018 • ACM ICMI: 2018 • ACM TEI: 2018 • Elsevier Computers & Graphics: 2018, 2019

Conference Organization:

Eurographics 2016: Fast Forward Chair
ACM ISS 2020: Web Chair (Ongoing)

Hip-directed walking-in-place using a single depth camera, Luís Bruno, Maurício Sousa, Alfredo Ferreira, João Madeiras Pereira, and Joaquim Jorge, International Journal of Human-Computer Studies (IJHCS), Elsevier, 2017

SleeveAR: Augmented Reality for Rehabilitation using Realtime Feedback, Maurício Sousa, João Vieira, Daniel Medeiros, Artur Arsénio, and Joaquim Jorge, ACM Intelligent User Interfaces (IUI), 2016

Eery Space: Facilitating Virtual Meetings Through Remote Proxemics, Maurício Sousa, Daniel Mendes, Alfredo Ferreira, João Madeiras Pereira, and Joaquim Jorge, Human-Computer Interaction—INTERACT, 2015