Curriculum Vitae

Maurício Sousa

Research Scientist
Reality Labs Research at Meta
https://mauriciosousa.github.io
mauriciosousa@acm.org
Google Scholar

Interests

Human-computer interaction, human-robot interaction, spatial computing, 3D user interfaces, virtual and tangible, fabrication, collocated and remote collaboration, holograms, wearable input/output, haptics, machine learning, large language models, augmented reality, mixed reality, and virtual reality.

Short bio

I am a Human-Computer Interaction Researcher at Reality Labs Research at Meta. Previously, I was a Postdoctoral Fellow at the DGP Lab, Department of Computer Science of the University of Toronto working with Professor Tovi Grossman. Before that, I was a researcher at the Visualization and Intelligent Multimodal Interfaces Group (VIMMI), University of Lisbon, under the supervision of Professor Joaquim Jorge. I received my PhD, MSc, and BSc degrees in Computer Science and Engineering from Instituto Superior Técnico, University of Lisbon. In my research, I have been designing and evaluating novel interaction techniques for engineering, architectural, and medical fields, focusing on computer-supported remote collaborative work in mixed reality. I also have experience in 3D and spatial user interfaces, virtual and tangible remote collaboration, mixed reality, fabrication, and actuated tangible interfaces applied to human-computer interaction. My research has been published in top international conferences and journals, such as ACM CHI, ACM UIST, ACM ISS, ACM IUI, ACM VRST, IEEE VR, INTERACT, IJHCS, and IEEE TVCG.

Education

Ph.D. in Computer Science and Engineering   **2020**
Instituto Superior Técnico, University of Lisbon
Thesis: *Perception Manipulation for Seamless Face-to-face Remote Collaboration*
Summa Cum Laude (highest honour for Doctoral Degree)
Advisor: Prof. Joaquim Jorge
Committee: Prof. Anthony Steed, Prof. Pedro Campos, Prof. Carlos Martinho,
Prof. Miguel Sales Dias, and Prof. Pavão Martins

M.Sc. in Information Systems and Computer Engineering   **2014**
Instituto Superior Técnico, University of Lisbon
Thesis: *Remote Proxemics for Collaborative Virtual Environments*
Advisors: Prof. Joaquim Jorge, and Prof. Alfredo Ferreira
Committee: Prof. Carlos Duarte and Prof. Pedro Sousa

B.Sc. in Information Systems and Computer Engineering   **2012**
Instituto Superior Técnico, University of Lisbon

Experience

Meta Reality Labs Research   **2024 - Present**
Visiting Research Scientist
Researching, designing, and evaluating advanced input interaction techniques for wearables, AI, and the next generation of neural interfaces and spatial computing.

DGP LAB, Dep of Computer Science, University of Toronto   **2020 - 2024**
Postdoctoral Fellow
Researching, designing, and evaluating novel interaction techniques. Mentoring and supporting 13 undergraduate and graduate students.

Champalimaud Center for the Unknown   **2018 - 2020**
Researcher
Researching, designing, and evaluating novel mixed reality interaction techniques for minimally invasive laparoscopic surgery.

INESC-ID, Visualization and Intelligent Multimodal Interfaces   **2012 - 2020**
Researcher
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. Managing and maintaining VIMMI's media lab.

Publications

30 conference proceedings, 7 journal articles, 13 other peer-reviewed publications, and 2 book chapters.
1040+ citations, h-index 20 (Google Scholar).

Peer-reviewed Conference Proceedings

C30 **Exploring User Placement for VR Remote Collaboration in a Constrained Passenger Space.** Daniel Medeiros, Graham Wilson, Mauricio Sousa, Nadia Pantidi, Diego Drago, Mark McGill, and Stephen Brewster. ACM Symposium on Virtual Reality Software and Technology (VRST), 2024
Best Paper Award

C29 **PhoneInVR: An Evaluation of Spatial Anchoring and Interaction Techniques for Smartphone Usage in Virtual Reality.** Fengyuan Zhu, Mauricio Sousa, Ludwig Sidenmark, and Tovi Grossman. ACM Conference on Human Factors in Computing Systems (CHI), 2024.

C28 **SynthScribe: Deep Multimodal Tools for Synthesizer Sound Retrieval and Exploration.** Stephen Brade, Bryan Wang, Mauricio Sousa, Gregory Lee Newsome, Sageev Oore, and Tovi Grossman. ACM Conference on Intelligent User Interfaces (IUI) , 2024

C27 **PinchLens: Applying Spatial Magnification and Adaptive Control Display Gain for Precise Selection in Virtual Reality.** Fengyuan Zhu, Ludwig Sidenmark, Mauricio Sousa, and Tovi Grossman. IEEE International Symposium on Mixed and Augmented Reality (ISMAR), 2023

C26 **Promptify: Text-to-Image Generation through Interactive Prompt Exploration with Large Language Models** Stephen Brade, Bryan Wang, Mauricio Sousa, Sageev Oore, and Tovi Grossman. ACM Symposium on User Interface Software and Technology (UIST), 2023

C25 **EnchantedBrush: Animating in Mixed Reality for Storytelling and Communication** Eve Mingxiao Li, Anran Qi, Mauricio Sousa, and Tovi Grossman. ACM GI Graphics Interface Conference, 2023.

C24 **Stargazer: An Interactive Camera Robot for Capturing How-To Videos Based on Subtle Instructor Cues** Jiannan Li, Mauricio Sousa, Karthik Mahadevan, Bryan Wang, Paula Akemi Aoyagui, Nicole Yu, Angela Yang, Ravin Balakrishnan, Anthony Tang, and Tovi Grossman. ACM Conference on Human Factors in Computing Systems (CHI), 2023.

C23 **Investigating Guardian Awareness Techniques to Promote Safety in Virtual Reality.** Sixuan Wu, Jiannan Li, Maurício Sousa, and Tovi Grossman. IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR), 2023.

C22 **MAGIC: Manipulating Avatars and Gestures to Improve Remote Collaboration.** Catarina G. Fidalgo, Mauricio Sousa, Daniel Mendes, Rafael dos Anjos, Daniel Medeiros, Karan Singh, and Joaquim Jorge. IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR), 2023.

C21 **Touching The Droid: Understanding and Improving Touch Precision With Mobile Devices in Virtual Reality.** Fengyuan Zhu, Zhuoyue Lyu, Mauricio Sousa, and Tovi Grossman. IEEE International Symposium on Mixed and Augmented Reality (ISMAR), 2022

C20 **immersivePOV: Filming How-To Videos with a Head-Mounted 360° Action Camera.** Kevin Huang, Jiannan Li, Mauricio Sousa, and Tovi Grossman. ACM Conference on Human Factors in Computing Systems (CHI), 2022.
Honorable Mention Award

C19 **ASTEROIDS: Exploring Swarms of Mini-Telepresence Robots for Physical Skill Demonstration.** Jiannan Li, Mauricio Sousa, Chu Li, Jessie Liu, Yan Chen, Ravin Balakrishnan, and Tovi Grossman. ACM Conference on Human Factors in Computing Systems (CHI), 2022.

C18 **Route Tapestries: Navigating 360° Virtual Tour Videos Using Slit-Scan Visualizations.** Jiannan Li, Jiahe Lyu, Maurício Sousa, Ravin Balakrishnan, Anthony Tang, and Tovi Grossman. ACM Symposium on User Interface Software and Technology (UIST), 2021

C17 **Promoting Reality Awareness in Virtual Reality through Proxemics.** Daniel Medeiros, Rafael dos Anjos, Nadia Pantidi, Kun Huang, Maurício Sousa, Craig Anslow and Joaquim Jorge. IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR), 2021.

C16 **"Grip-that-there": An Investigation of Explicit and Implicit Task Allocation Techniques for Human-Robot Collaboration.** Karthik Mahadevan, Maurício Sousa, Anthony Tang, and Tovi Grossman. ACM Conference on Human Factors in Computing Systems (CHI), 2021.
Honorable Mention Award

C15 **Negative Space: Investigating Workspace Awareness in 3D Face-to-face Remote Collaboration.** Maurício Sousa, Daniel Medeiros, and Joaquim Jorge. ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry (VRCAI), 2019

C14 **Safe Walking in VR.** Maurício Sousa, Daniel Medeiros, Francisco Venda, and Joaquim Jorge. ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry (VRCAI), 2019

C13 **Adventures in Hologram Space: Exploring the Design Space of Eye-to-eye Volumetric Projection-based Telepresence.** Rafael Kuffner dos Anjos, Maurício Sousa, Daniel Medeiros, Daniel Mendes, Mark Billinghurst, Craig Anslow and Joaquim Jorge. ACM Symposium on Virtual Reality Software and Technology (VRST), 2019

C12 **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
Featured in the 'Best of CHI 2019' event by IndiaHCI

C11 **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

C10 **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

C9 **VRRRRoom: Virtual Reality for Radiologists in the Reading Room.** Maurício Sousa, Daniel Mendes, Soraia Paulo, Nuno Matela, Joaquim Jorge, and Daniel S. Lopes. ACM Conference on Human Factors in Computing Systems (CHI), 2017

C8 **PRECIOUS! Out-of-reach Selection using Iterative Refinement in VR.** Daniel Mendes, Daniel Medeiros, Eduardo Cordeiro, Maurício Sousa, Alfredo Ferreira, and Joaquim Jorge. IEEE Symposium on 3D User Interfaces (3DUI), 2017

C7 **Mid-air Modeling with Boolean Operations in VR.** Daniel Mendes, Daniel Medeiros, Maurício Sousa, Ricardo Ferreira, Alberto Raposo, Alfredo Ferreira, and Joaquim Jorge. IEEE Symposium on 3D User Interfaces (3DUI), 2017

C6 **Effects of Speed and Transitions on Target-based Travel Techniques.** Daniel Medeiros, Eduardo Cordeiro, Daniel Mendes, Maurício Sousa, Alberto Raposo, Alfredo Ferreira and Joaquim Jorge. ACM Symposium on Virtual Reality Software and Technology (VRST), 2016

C5 **Perceiving Depth: Optical versus Video See-through.** Daniel Medeiros, Maurício Sousa, Daniel Mendes, Alberto Raposo, and Joaquim Jorge. ACM Symposium on Virtual Reality Software and Technology (VRST), 2016

C4 **SleeveAR: Augmented Reality for Rehabilitation using Realtime Feedback.** Maurício Sousa, João Vieira, Daniel Medeiros, Artur Arsenio, and Joaquim Jorge. ACM Intelligent User Interfaces (IUI), 2016

C3 **From Tecton to Teknos: Going back to the Classical Roots of Architecture.** Daniel Mateus, Maurício Sousa, Rui de Klerk, Sandra Gama, Joaquim Jorge, and José Duarte. Education and Research in Computer Aided Architectural Design in Europe (eCAADe), 2015

C7 **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

C1 **Beyond Post-It: Structured Multimedia Annotations for Collaborative VEs.** João Guerreiro, Daniel Pires, Maurício Sousa, Daniel Mendes, Ismael Santos, Alberto Raposo, and Joaquim Jorge. Eurographics Symposium on Virtual Environments (EGVE), 2014

Journal Articles

J7 **A Survey on Remote Assistance and Training in AR and VR Environments**. Catarina G. Fidalgo, Yukang Yan, Hyunsung Cho, Mauricio Sousa, David Lindlbauer, and Joaquim Jorge. IEEE Transactions on Visualization and Computer Graphics (TVCG), 2023

J6 **Laparoscopy with Augmented Reality Adaptations.** Ezequiel Zorzal, José Miguel Gomes, Maurício Sousa, Pedro Belchior, Pedro G da Silva, Nuno Figueiredo, Daniel S. Lopes, and Joaquim Jorge. Elsevier Journal of Biomedical Informatics, 2020

J5 **Anatomy Studio: a Tool for Virtual Dissection Through Augmented 3D Reconstruction Sessions.** Ezequiel Zorzal, Maurício Sousa, Daniel Mendes, Rafael K dos Anjos, Soraia F. Paulo, Pedro Rodrigues, José Mendes, Vincent Delmas, Jean-Francois Uhl, José Mogorrón, Daniel S. Lopes, and Joaquim Jorge. Computers & Graphics, 2019

J4 **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
Recipient of the Encarnação Award 2020 from Eurographics Portuguese chapter

J3 **Design and evaluation of novel out-of-reach selection techniques for VR using iterative refinement.** Daniel Mendes, Daniel Medeiros, Maurício Sousa, Eduardo Cordeiro, Alfredo Ferreira, and Joaquim Jorge. Computers & Graphics, 2017
Honourable Mention in the 33rd Spring Conference on Computer Graphics

J2 **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

J1 **Expeditious Illustration of Layer-Cake Models On and Above a Tactile Surface.** Daniel S. Lopes, Daniel Mendes, Maurício Sousa, and Joaquim Jorge. Computers & Geosciences (in press), 2016

Book Chapters

B2 **A Tool for Collaborative Anatomical Dissection.** Ezequiel Zorzal, Maurício Sousa, Daniel Mendes, Soraia Paulo, Pedro Rodrigues, Joaquim Jorge, and Daniel Simões Lopes. Book chapter in Digital Anatomy, Springer, 2021

B1 **Remote Proxemics.** Maurício Sousa, Daniel Mendes, Daniel Medeiros, Alfredo Ferreira, João Madeiras Pereira, and Joaquim Jorge. Book chapter in Collaboration Meets Interactive Spaces, Springer, 2016

Other Peer-Reviewed Publications

O13 **VRChoir: Exploring Remote Choir Rehearsals via Virtual Reality** Tianquan Di, Daniel Medeiros, Mauricio Sousa, and Tovi Grossman. IEEE Conference on Virtual Reality and 3D User Interfaces Posters (IEEE VR), 2023

O12 **Anatomy Studio II: A Cross-Reality Application for Teaching Anatomy.** Joaquim Jorge, Pedro Belchior, Abel Gomes, Maurício Sousa, João Pereira, and Jean-François Uhl. XR for Healthcare and Wellbeing Workshop Workshop (IEEE VR), 2022

O11 **Design requirements to improve laparoscopy via XR.** Ezequiel R Zorzal, Maurício Sousa, Pedro Belchior, João Madeiras Pereira, Nuno Figueiredo, and Joaquim Jorge. XR for Healthcare and Wellbeing Workshop Workshop (IEEE VR), 2022

O10 **Constellation: a Multi-User Interface for Remote Drone Tours.** Jiannan Li, Maurício Sousa, Ravin Balakrishnan, and Tovi Grossman. International Conference on Human-Agent Interaction (HAI), 2021

O9 **Demo hour.** Paden Shorey, Audrey Girouard, Sang Ho Yoon, Yunbo Zhang, Ke Huo, Karthik Ramani, Maurício Sousa, Daniel Mendes, Soraia Paulo, Nuno Matela, Joaquim Jorge, Daniel S. Lopes, Dirk Wenig, Johannes Schöning, Alex Olwal, Mathias Oben, and Rainer Malaka. Demo hour. interactions 24, 6 (October 2017), 8-11.

O8 **Evaluation of Travel Techniques for Virtual Reality.** Eduardo Cordeiro, Daniel Medeiros, Daniel Mendes, Maurício Sousa, Alberto Raposo, Alfredo Ferreira, and Joaquim Jorge. Portuguese Meeting of Computer Graphics (EPCG), 2016

O7 **Beyond Eery Space: Applying Gradual Engagement to Remote Proxemics.** Maurício Sousa, Daniel Medeiros, Alberto Raposo, and Joaquim Jorge. Collaboration meets Interactive Surfaces Workshop, ACM Interactive Tabletops and Surfaces(ITS), 2015

O6 **Augmented Reality for Rehabilitation Using Multimodal Feedback.** João Vieira, Maurício Sousa, Artur Arsénio, and Joaquim Jorge. REHAB2015 Workshop, 2015

O5 **Enabling Remote Proxemics through Multiple Surfaces.** Daniel Mendes, Maurício Sousa, João Madeiras Pereira, Alfredo Ferreira, and Joaquim Jorge. Collaboration meets Interactive Surfaces Workshop, ACM Interactive Tabletops and Surfaces(ITS), 2014

O4 **Eery Proxemics: Proximidade à Distância usando Múltiplas Superfícies.** Maurício Sousa, Daniel Mendes, João Madeiras Pereira, Alfredo Ferreira, and Joaquim Jorge. Portuguese Meeting of Computer Graphics (EPCG), 2014

O3 **ThumbCam: Returning to single touch interactions to explore 3D virtual environments.** Daniel Mendes, Maurício Sousa, Alfredo Ferreira, and Joaquim Jorge. ACM Interactive Tabletops and Surfaces(ITS), 2014

O2 **Binding a Handheld Device with its Owner. Maurício Sousa and Joaquim Jorge.** Collaboration meets Interactive Surfaces Workshop, ACM Interactive Tabletops and Surfaces (ITS), 2013

O1 **Collaborative 3D Visualization on Large Screen Displays.** Daniel Mendes, Maurício Sousa, Bruno Araújo, Alfredo Ferreira, Hildegardo Noronha, Pedro Campos, Luciano Soares, Alberto Raposo, and Joaquim Jorge. Powerwall Workshop, SIGCHI Conference on Human Factors in Computing Systems (CHI), 2013

Theses

T2 **Perception Manipulation for Seamless Face-to-face Remote Collaboration.**
Maurício Sousa. Ph.D. Thesis. Instituto Superior Técnico, University of Lisbon. 2020

T1 **Remote Proxemics for Collaborative Virtual Environments.**
Maurício Sousa. M.Sc. Thesis. Instituto Superior Técnico, University of Lisbon. 2014

Academic Service

Program Committee

ACM Conference on Human Factors in Computing Systems (CHI)
Subcommittee Associate Chair: *Interacting with Devices: Interaction Techniques & Modalities*
2024, 2025

ACM Symposium on User Interface Software and Technology (UIST)
Associate Chair
2024

IEEE International Symposium on Mixed and Augmented Reality (ISMAR)
2021, 2024

International Conference on Graphics and Interaction (ICGI)
2021, 2022, 2023, 2024

ACM International Conference on Multimodal Interaction (ICMI)
2020

Conference Organizing Committee

IEEE Conference on Virtual Reality and 3D User Interfaces (VR)
Video Co-chair
2023

ACM International Conference on Interactive Surfaces and Spaces (ISS)
Web Chair and Online Experience Co-chair
2020, 2022

IEEE Conference on Virtual Reality and 3D User Interfaces (VR)
Web Chair
2021, 2022

Eurographics
Fast-forward Chair
2016

Workshops Organizing Committee

W1 **Enhancing cross-reality applications and user experiences.** Frank Maurer, Craig Anslow, Joaquim Jorge, and
Maurício Sousa. International Conference on Advanced Visual Interfaces (AVI), 2022

Conference Session Chair

ACM Symposium on User Interface Software and Technology (UIST)
Session: *Device Augmentation & Communication*
2021

Peer Reviewer

Transactions on Visualization and Computer Graphics (TVCG)
2023, 2024

IEEE Conference on Virtual Reality and 3D User Interfaces (VR)
2019, 2023, 2024

ACM Conference on Human Factors in Computing Systems (CHI)
2018, 2020, 2021, 2022, 2023, 2024

ACM Symposium on Virtual Reality Software and Technology (VRST)
2017, 2018, 2020, 2023, 2024

ACM International Conference on Multimodal Interaction (ICMI)
2018, 2019, 2024

The International Journal of Human-Computer Studies (IJHCS)
2023

ACM International Conference on Tangible, Embedded, and Embodied Interaction (TEI)
2018, 2020, 2023

IEEE VIS
2023

ACM Symposium on User Interface Software and Technology (UIST)
2020, 2021, 2022, 2023

IEEE International Symposium on Mixed and Augmented Reality (ISMAR)
2017, 2018, 2019, 2020, 2021, 2022, 2023

ACM Conference on Designing Interactive Systems (DIS)
2016, 2021, 2023

MDPI Sensors
2023

Springer Virtual Reality (VR)
2023

ACM Conference on Intelligent User Interfaces (IUI)
2023

Elsevier Computers & Graphics
2018, 2019, 2020, 2021, 2023

International Conference on Graphics and Interaction (ICGI)
2021, 2022, 2023

ACM International Conference on Interactive Surfaces and Spaces (ISS)
2015, 2016, 2017, 2018, 2019, 2020, 2022

ACM Symposium on Spatial User Interaction (SUI)
2017, 2020

ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)
2020

IEEE Consumer Electronics Magazine (CEM)
2016

Thesis Committee Jury Member

Master's Thesis Committee for Filipe Guedes Barbosa   **2022**
Faculdade de Engenharia, Universidade do Porto
Thesis: *Shape-a-getti: A haptic device for getting multiple shapes using a single actuator.*

Teaching And Supervision

Teaching Assistant

Human-Computer Interaction   **2017/18**
Instituto Superior Técnico, University of Lisbon
Undergraduate course on the fundamental principles and rules for the design, development, and evaluation of interactive devices, systems, and services.

PhD Students

1 **Catarina G. Fidalgo**, Instituto Superior Técnico, Carnegie Mellon University   **2021 -**
Co-Advisor with Joaquim Jorge and David Lindlbauer
Thesis: TBD
[C22]

Master Students

7 **Mingxiao (Eve) Li**, University of Toronto.   **2021 - 2023**
Co-Advisor with Tovi Grossman.
Thesis: *EnchantedBrush: Animating in Mixed Reality for Storytelling and Communication*
[C25]

6 **João Simões**, Instituto Superior Técnico, University of Lisbon.   **2021 - 2023**
Co-Advisor with Joaquim Jorge.
Thesis: *SURI : Stretching User References for Interaction - Multi-user collaboration with a shared perspective*

5 **Carlos McGregor Muro**, University of Toronto.   **2020 - 2022**
Co-Advisor with Tovi Grossman.
Thesis: *Knowing when students struggle before verbalizing it using non-intrusive psycho-physiological indicators.*

4 **Manuel Lopes**, Instituto Superior Técnico, University of Lisbon. **2020 - 2021**
Co-Advisor with Joaquim Jorge.
Thesis: *CHASM - Computer-Human Assisted Segmentation of Medical Structures*

3 **Catarina G. Fidalgo**, Instituto Superior Técnico, University of Lisbon. **2019 - 2020**
Co-Advisor with Joaquim Jorge.
Thesis: *MAGIC: Manipulating Avatars and Gestures to Improve Remote Collaboration*
[J7]

2 **Francisco Venda**, Instituto Superior Técnico, University of Lisbon. **2016 - 2017**
Unofficial Co-Advisor with Joaquim Jorge.
Thesis: *Safe Walking in VR*
[C14]

1 **João Vieira**, Instituto Superior Técnico, University of Lisbon. **2014 - 2015**
Unofficial Co-Advisor with Joaquim Jorge and Artur Arsénio.
Thesis: *SleeveAR: Augmented Reality for Rehabilitation Using Realtime Feedback*
[C4] [O6]

Undergrad Researchers

6 **Chao-Jung Lai**, University of Toronto. **2023 - 2024**
Co-Advisor with Tovi Grossman and Ludwig Sidenmark.

5 **Helena Jovic**, University of Toronto. **2022 - 2023**
Co-Advisor with Tovi Grossman.

4 **Sixuan Wu**, University of Toronto. **2022 - 2023**
Co-Advisor with Tovi Grossman.
[C23]

3 **Angela Yang**, University of Toronto. **2022**
Co-Advisor with Tovi Grossman.
[C24]

2 **Tianquan (Andy) Di**, University of Toronto. **2021 - 2022**
Co-Advisor with Tovi Grossman.
[O13]

1 **Kevin Huang**, University of Toronto. **2020 - 2021**
Co-Advisor with Tovi Grossman.
[C20]

Research Assistants

1 **Chu Li**, University of Toronto. **2021 - 2022**
Co-Advisor with Tovi Grossman.
[C19]

Mentoring (Ph.D. Students)

4 **Jiannan Li**, University of Toronto. **2020 - 2023**
[C24] [C23] [C20] [C19] [C18] [O10]

3 **Laura (Di) Chen**, University of Toronto.   **2020 - 2023**

2 **Fengyuan Zhu**, University of Toronto.   **2020 - 2023**
  [C29] [C27] [C21]

1 **Karthik Mahadevan**, University of Toronto.   **2020 - 2023**
  [C24] [C16]

Funding

5 **Snap Creative Challenge**
  Project: *Audio-Augmented Reminiscence by Capturing and Replaying Memories*
  Team Member
  2023

4 **Champalimaud Center for the Unknown Grant & INESC-ID**
  Project: *Laparoscopic Surgery Through Augmented Reality*
  A viability study for the inclusion of Augmented Reality in the laparoscopic surgical theater.
  Researcher
  2018

3 **Portuguese Science and Technology Foundation Grant**
  Project: *Interactive Tablets for Collaborative Scenarios Related to 3D Medical Image Exploration*
  Interactive experiences for medical collaborative workspaces 3D images.
  Researcher
  2017

2 **Portuguese Science and Technology Foundation Grant**
  Project: *Digital Mockup: Touching the 3rd Dimension*
  Interaction techniques for architectural 3D modeling design and review in mixed reality
  Researcher
  2016

1 **Portuguese Science and Technology Foundation Grant**
  Project: *CEDAR - Collaborative Engineering Design And Review*
  Design and evaluation of novel collaborative spacial interaction techniques for the Oil & Gas Industry
  Researcher
  2015

Awards and Recognition

8 Best Paper Award ACM VRST 2014
  [C30] *Exploring User Placement for VR Remote Collaboration in a Constrained Passenger Space.*

7 Special Recognition for Outstanding Reviews
  UIST 2023 Papers

8 Recognition of Service Award IEEE VR 2023.
  In appreciation for contributions to IEEE VR Conference as Videos Co-Chair.

7 Special Recognition for Outstanding Reviews
  UIST 2022 Papers

6 Best Paper Honorable Mention Award ACM CHI 2022
  [C20] *immersivePOV: Filming How-To Videos with a Head-Mounted 360° Action Camera.*

5 Recognition of Service Award IEEE VR 2022.
  In appreciation for contributions to IEEE VR Conference as Web Chair.

4 Best Paper Honorable Mention Award ACM CHI 2021.
  [C16] *"Grip-that-there": An Investigation of Explicit and Implicit Task Allocation Techniques for Human-Robot Collaboration.*

3 Paper featured in the 'Best of CHI 2019' event by IndiaHCI.
  [C12] *WARPING DEIXIS: Distorting Gestures to Enhance Collaboration.*

2 Paper recipient of the Encarnação Award 2020 from Eurographics Portuguese chapter.
  [J4] *Magic Carpet: Interaction Fidelity for Flying in VR.*

1 Honorable Mention Award in the 33rd Spring Conference on Computer Graphics 2017.
  [J3] *Design and evaluation of novel out-of-reach selection techniques for VR using iterative refinement.*

Selected Media

2 Tuning into Tomorrow.
  AI can help musicians compose and create new sounds. Is it just another music-making tool– or something else?
  Adina Bresge, University of Toronto Magazine. April 2024
  [C28]

1 Interactive 'Stargazer' camera robot assists with how-to video creation.
  Krystle Hewitt, Department of Computer Science, University of Toronto. May 2023
  [C24]

Contact References

References are available upon request.