

# Mauricio Sousa

Project Senior Assistant Professor

Graduate School of Media Design (KMD)

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**Search Committee for the Open Faculty Search 2025-2026**  
Computer Science and Engineering Department  
Instituto Superior Técnico - Universidade de Lisboa

Dear Members of the Search Committee,

I am writing to express my interest in the Assistant Professor position at the Computer Science and Engineering Department, Instituto Superior Técnico - Universidade de Lisboa (DEI/IST). My research spans Human–Computer Interaction (HCI), AI wearable devices, and Spatial Computing, with a focus on designing inclusive technologies that enable seamless interaction between people, their augmented capabilities, and their environments.

I am a Project Senior Assistant Professor at Keio University's School of Media Design since the beginning of October 2025, and I bring with me a broad foundation of research experience spanning academia and industry. Prior to this appointment, I served as a Senior Research Scientist at Reality Labs Research at Meta, where I led the design and development of wrist-worn AI devices for multimodal sensing, activity recognition, and haptic communication. These projects contribute to a broader agenda of creating intelligent, body-worn systems that perceive the world through computer vision and sensor fusion, and communicate via tactile, auditory, or spatial feedback.

My academic trajectory includes a postdoctoral fellowship at the University of Toronto's Dynamic Graphics Project (DGP) Lab and a B.Sc., M.Sc., and Ph.D. from DEI/IST. I have authored over 50 peer-reviewed publications at premier venues such as CHI, UIST, IEEE VR, and TVCG, and have served in senior program and organizing roles for major HCI and interactive media conferences.

My research integrates **computer-supported collaborative work, spatial computing, augmented- mixed-and virtual reality, artificial intelligence, multimodal input, multimodal output and wearable devices**. In my research, I have been designing and evaluating novel interaction techniques focused on enhancing communication and collaboration across disciplines such as **engineering, architecture, medicine, remote learning and storytelling**. I combine prototyping, evaluation, and interdisciplinary methods to explore how physical and digital experiences intersect.

Throughout my academic journey, I have mentored students across levels and disciplines—three Master's students during my Ph.D., five undergraduate researchers, one research assistant, and three graduate students during my postdoctoral fellowship. My mentoring style blends hands-on advising with open communication. I draw on hands-on laboratory experience to help students navigate technical challenges while fostering independent exploration and ownership. These collaborations have led to top-tier publications and remain among the most fulfilling aspects of my academic practice.

With a background that bridges **Human–Computer Interaction, AI wearable devices, and spatial computing** with **interaction design for engineering, health, architecture, and storytelling**, I am well positioned to contribute to IST's community and science overall. Also, my experience has led me to believe that impactful and inspiring teaching practices are grounded in these five primary pedagogic principles that I want to encourage: **inspire and motivate; hands-on learning and experimentation; discussion and critical thinking; allowing for creativity; and learning with each other**. I believe my aspirations, motivation, and experience align closely with IST's goals.

Thank you very much for considering my application. It would be an honor to contribute to my *alma mater* on big societal challenges, advancing innovation, and nurturing the next generation of *change makers* through my research, teaching, mentorship, and academic service.

Sincerely,

