Special Issue

Challenges in Human-Centered Robotics

Message from the Guest Editors

In a deterministic setting, the difficulties associated with robotics are well-known and have reached a certain level of maturity. However, the inclusion of the human element disrupts this determinism. How robots should act, react, assist, or take over tasks is suddenly being influenced by factors, such as the user's mental model, emotional state, and perception. Therefore, the next generation of human–computer collaboration methods will be enabled at the intersection of human-centered design and robotics.

This Special Issue discusses the fundamental challenges in human-centered robotics and possible approaches to addressing them. From the Human-Centered Design perspective, we aim to discuss issues, including robot safety, delayed operations, shared control, human–robot communication and interaction, haptics, learning, robot aesthetics, and unconventional interaction methods with robots.

Guest Editors

Dr. Sven Mayer

Dr. Michael Gienger

Dr. Alexander Dietrich

Prof. Dr. Albrecht Schmidt

Prof. Dr. Alin Albu-Schäffer

Deadline for manuscript submissions

closed (30 June 2024)

About the Journal

Message from the Editor-in-Chief

Towards the end of 2018, I was approached to be the new Editor-in-Chief for the *Multimodal Technologies and Interaction* (*MTI*) journal. I was honored to be considered and happily accepted the role, starting in January 2019.

MTI is a new journal, and since starting in 2017, has published 10 issues with over 140 papers, with the number of publications continuing to grow. As Editor-in-Chief, I would like to continue increasing the number of high-quality papers that we publish, and in addition, work towards improving the journal in other ways, such as getting the journal listed on ISI, establishing an impact factor, and increasing our social media presence.

I would also like to better engage with the research community, including bringing some new members onto the Editorial Board, focusing the journal on the latest areas of interest, marketing at leading conferences and, most importantly, getting feedback from our readers.

Editor-in-Chief

Prof. Dr. Mark Billinghurst
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Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, dblp Computer Science Bibliography, and other databases.

Journal Rank:

CiteScore - Q1 (Neuroscience (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 25 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the first half of 2025).