



## Multimodal Sensing for Human-Robot Interaction

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### Message from the Guest Editors

The development of robots and artificial agents conceived for being part of our everyday life is a matter of fact. Even if almost all robots and devices are equipped with multiple sensors, many limitations of these autonomous systems are still evident: social robots have difficulty understanding human emotions and intentions, and thus they may fail to reply appropriately; autonomous mobile robots struggle to have full knowledge of the surrounding environment to make the right choice at the right moment; industrial robots have difficulty understanding and learning the needs of their human partners.

For these reasons, we need to pursue a more integrated perspective, one which involves a strict connection between multimodal sensing and actuation, in order to develop intelligent machines able to understand human behavior and act accordingly.

The purpose of this Special Issue is, therefore, to gather the latest research in the field of human-robot interaction, focusing on the integration of multimodal sensing approaches with the understanding, planning, and acting strategies of autonomous robots.





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