Intuitive Human–Machine Interfaces: Recent Advances in Exoskeletons for Healthcare and Bionic Prostheses

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Deadline for manuscript submissions:
closed (31 May 2024)

Message from the Guest Editors

This Special Issue explores cutting-edge innovations, methodologies and research at the intersection of intuitive interfaces for healthcare and rehabilitation robotics. From exoskeletons enhancing mobility for individuals with upper or lower limb disabilities to intelligent prosthetic devices facilitating users in daily activities, the contributions span a diverse range of applications.

Furthermore, this Special Issue will feature synergistic works combining artificial intelligence, sensor technologies and data analytics employed for improving the performance of such innovative interfaces. Researchers, practitioners and innovators in the healthcare field are invited to explore this collection, offering valuable insights and inspiration for the future of rehabilitative robots and bionics prosthesis. Together, we stand at the forefront of transforming lives, particularly for individuals with disabilities, and this Special Issue provides a guideline for continual progress in this dynamic and transformative domain.

Special Issue

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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