

Special Session

Rehabilitation and Assistive Robotics

Description/Scope

Rehabilitation and Assistive Robotics investigates the application of robotics in therapy procedures for recovering motor control and motor capabilities in persons with impairment following accidents or diseases such as strokes. It also aims at developing robotic aids for independent living for elderly and disabled people. With the growth of the elderly and disabled population in Europe, in the last decades, this area is getting more and more important for robotics. This special session aims to bring together robotic researchers both at academic and industrial level worldwide with emphasis for the Iberian community, performing research on Rehabilitation and Assistive robotics.

Topics (but are not limited to)

- Adaptation and learning in assistive/rehabilitation robotics;
- Assistive robotics;
- Human-Robot interfaces for assisting people with disabilities;
- Lower-limb and upper-limb rehabilitation robotics;
- Multimodal interfaces for assistive/rehabilitation robots;
- Rehabilitation robotics;
- Robotic Prosthesis and Orthotics;
- Social cognition towards assistive/rehabilitation robots;
- Technologies for assistive/rehabilitation robotics;
- User acceptance of assistive/rehabilitation robots;
- User-centered design in assistive/rehabilitation robotics.

Organizers

- Brígida Mónica Faria (btf@ess.ipp.pt), Polytechnic of Porto (ESS - P.PORTO), Portugal
- Juan C. Moreno (jc.moreno@csic.es), Cajal Institute, Spain
- Luis Paulo Reis (lpreis@fe.up.pt), FEUP/LIACC, Porto, Portugal

Program Committee

Marcelo Petry - INESC TEC's - Robotics in Industry and Intelligent Systems Center

Alejandro Linares-Barranco - University of Seville

Cristina Santos – University of Minho

Nicolas Garcia-Aracil - UNIVERSIDAD MIGUEL HERNANDEZ

Alicia Casals - Institute for Bioengineering of Catalonia

Marco Ceccarelli - University of Cassino

Filomena Soares - University of Minho

Antonio J. del Ama - Rey Juan Carlos University

Andrés Úbeda - University of Alicante

Eduardo Iáñez - Miguel Hernández University of Elche

Nuno Lau – University of Aveiro

Armando Sousa – University of Porto

António Paulo Moreira – University of Porto

Manuel Silva – Polytechnic of Porto