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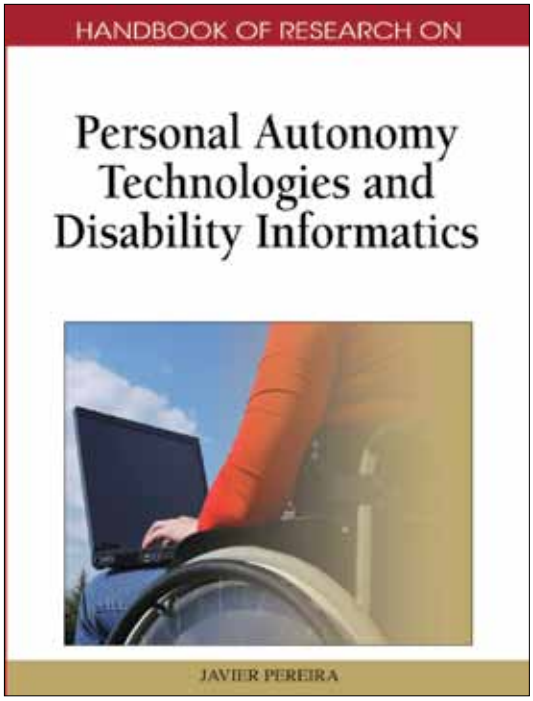
Handbook of Research on Personal Autonomy Technologies and Disability Informatics



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Javier Pereira (University of A Coruna, Spain)

Information technologies constitute a very important contribution to the integration of a population into its environment. Unfortunately, in most cases the development of new technologies does not consider the special needs of potentially disabled users.

The Handbook of Research on Personal Autonomy Technologies and Disability Informatics proposes a comprehensive description of the needs that must be considered by IT engineers when designing technical assistance tools that can be used by disabled persons according to their specific motoric, visual, auditive, or psychic needs. Contributing basic knowledge for persons in IT development and health care related to physical and psychic disabilities, this book adds over 50 authoritative articles by international experts to the defining body of research in autonomy technologies and disability informatics.

Topics Covered:

- Altered auditory feedback as a prosthetic-therapy
- Assistive technologies
- Augmentative and alternative communication devices
- Blind user interfacing
- Human-centered metal hydride actuator systems for rehabilitation
- Nascent access technologies
- Personal autonomy with e-mentoring
- Sensory Rhythmic Stimulation
- Smart sensing solutions for the visually impaired
- Web accessibility

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Javier Pereira was born in Ourense, Spain, in 1972. He received the M.S. in Computer Science from the University of A Coruña (Spain) in 1995, and the Ph.D. degree in Computer Science from the same university in 2004. He is an Associated Professor in the area of Radiology and Physical Medicine at the Department of Medicine in the Faculty of Health Sciences, in the University of A Coruña. His current research interests include: accessibility in Information and Communication Technologies, medical information systems, DICOM, PACS, medical informatics, disability and informatics, and the development of technical aids.

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