1. | Record Nr. | UNINA9910299889703321 |
|---|---|
| Autore | Xing Bo |
| Titolo | Smart Maintenance for Human–Robot Interaction : An Intelligent Search Algorithmic Perspective / / by Bo Xing, Tshilidzi Marwala |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018 |
| ISBN | 3-319-67480-3 |
| Edizione | [1st ed. 2018.] |
| Descrizione fisica | 1 online resource (XXIX, 305 p. 68 illus.) |
| Collana | Studies in Systems, Decision and Control, , 2198-4182 ; ; 129 |
| Disciplina | 629.892019 |
| Soggetti | Robotics |
| | Automation |
| | User interfaces (Computer systems) |
| | Artificial intelligence |
| | Computational intelligence |
| | Robotics and Automation |
| | User Interfaces and Human Computer Interaction |
| | Artificial Intelligence |
| | Computational Intelligence |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters. |
| Nota di contenuto | Introduction to Human Robot Interaction -- Introduction to Smart Maintenance -- Introduction to Intelligent Search Algorithms -- Hardware Capacity - Beginning of Life Perspective -- Hardware Capacity   Middle of Life Perspective -- Hardware Capacity   End of Life Perspective -- Cyberware Capacity   Platform and Middleware Layers Perspective -- Cyberware Capacity   Applications Layer Perspective -- Cyberware Capacity   Energy Autonomy Perspective -- Human Capacity   Physiology Perspective -- Human Capacity   Biopsychosocial Perspective -- Human Capacity   Exposome Perspective -- Conclusion. |
| Sommario/riassunto | This self-contained book, written by active researchers, presents up-to-date information on smart maintenance strategies for human–robot interaction (HRI) and the associated applications of novel search algorithms in a single volume, eliminating the need to consult scattered resources. Unlike other books, it addresses maintaining a smart HRI |

from three dimensions, namely, hardware, cyberware, and hybrid-asset management, covering problems encountered in each through a wide variety of representative examples and elaborated illustrations. Further, the diverse mathematical models and intelligent systems constructions make the book highly practical. It enables readers interested in maintenance, robotics, and intelligent systems but perplexed by myriads of interrelated issues to grasp basic methodologies. At the same time, the referenced literature can be used as a roadmap for conducting deeper researches.