

1. Record Nr.	UNINA9910727281103321
Titolo	Human-Robot Interaction : Perspectives and Applications // Ramana Vinjamuri, editor
Pubbl/distr/stampa	London, United Kingdom : , : IntechOpen, , 2023
ISBN	1-80356-411-3
Descrizione fisica	1 Online-Ressource (226 pages)
Disciplina	004.019
Soggetti	Human-computer interaction - Social aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	<p>1. Introductory Chapter: Human-Robot Interaction - Advances and Applications -- By Helen Meyerson, Parthan Olikkal, Dingyi Pei and Ramana Vinjamuri -- 2. EEG Control of a Robotic Wheelchair -- By Ashok Kumar Chaudhary, Vinay Gupta, Kumar Gaurav, Tharun Kumar Reddy and Laxmidhar Behera -- 3. Perspective Chapter: Classification of Grasping Gestures for Robotic Hand Prostheses Using Deep Neural Networks -- By Ruthber Rodriguez Serrezuela, Enrique Maranon Reyes, Roberto Sagaro Zamora and Alexander Alexeis Suarez Leon -- 4. Perspective Chapter: Cooperation among Humans and Robots in Remote Robot Systems with Force Feedback -- By Pingguo Huang and Yutaka Ishibashi -- 5. Perspective Chapter: Multi-Contact Humanoid Stability for Increased Interaction in Unstructured Environments -- By Parastoo Dastangoo and Alejandro Ramirez-Serrano -- 6. Perspective Chapter: Dielectric Elastomer Sensor Capable of Measuring Large Deformation and Pressure -- By Seiki Chiba and Mikio Waki -- 7. Perspective Chapter: Fabulous Design Speed Industrial Robotic Arm -- By Falih Salih Mahdi Alkhafaji -- 8. Healthcare Robots and Smart Hospital Based on Human-Robot Interaction -- By Kazuhiko Terashima, Kazuhiro Funato and Takuyuki Komoda -- 9. Perspective Chapter: Digital Inclusion of the Farming Sector Using Drone Technology -- By Suman Dutta, Ajit Kumar Singh, Bhabani Prasad Mondal, Debashis Paul and Kiranmoy Patra -- 10. Perspective Chapter: European Robotics League - Benchmarking through Smart City Robot Competitions -- By Matthew Studley, Sarah Carter, Francisco J. Perez-Grau, Antidio Viguria</p>

Jimenez, Gabriele Ferri, Fausto Ferreira, Deebul Nair, Sven Schneider, Paul G. Ploger, Pedro U. Lima, Meysam Basiri, Gerhard K. Kraetzschmar, Daniele Nardi, Lun Wang, Emanuele Antonioni, Vincenzo Suriani and Luca Iocchi.

Sommario/riassunto

The book Human-Robot Interaction - Perspectives and Applications highlights the latest developments and obstacles in the field of human-machine interaction, including collaborative and humanoid robots, symbiosis between humans and robots, human-human collaboration, and robotics. Human-robot interaction has immense potential in areas like healthcare, education, manufacturing, military, and space exploration. This volume consists of several chapters that explore various topics such as the use of robotic wheelchairs, deep neural networks for robot grasp recognition, materials and sensors required for human-robot interaction, the use of drone technology in agriculture, healthcare robots in smart hospitals, and more.
