1. Record Nr. UNINA990003288220403321

Autore	Reale comitato geologico d'Italia
Titolo	MEMORIE PER SERVIRE ALLA DESCRIZIONE DELLA CARTA GEOLOGICA D'ITALIA
Pubbl/distr/stampa	Roma : Bertero, 1912
Descrizione fisica	pp. 257
Disciplina	021.051
Locazione	DECGE
Collocazione	021.051.COM.13
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

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Autore	Grebenstein Markus
Titolo	Approaching Human Performance : The Functionality-Driven Awiwi Robot Hand / / by Markus Grebenstein
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	9783319035932 3319035932
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XXXIV, 209 p. 164 illus., 133 illus. in color.)
Collana	Springer Tracts in Advanced Robotics, , 1610-7438 ; ; 98
Disciplina	629.8933
Soggetti	Robotics Automation Artificial intelligence Robotics and Automation Artificial Intelligence
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Nota di contenuto	Analysis of the Current State of Robot Hands -- Analysis of the Human Hand -- The Awiwi Hand: An Arti cial Hand for the DLR Hand Arm System.- Results.
Sommario/riassunto	Humanoid robotics have made remarkable progress since the dawn of robotics. So why don't we have humanoid robot assistants in day-to-day life yet? This book analyzes the keys to building a successful humanoid robot for field robotics, where collisions become an unavoidable part of the game. The author argues that the design goal should be real anthropomorphism, as opposed to mere human-like appearance. He deduces three major characteristics to aim for when designing a humanoid robot, particularly robot hands: - Robustness against impacts - Fast dynamics - Human-like grasping and manipulation performance Instead of blindly copying human anatomy, this book opts for a holistic design methodology. It analyzes human hands and existing robot hands to elucidate the important functionalities that are the building blocks toward these necessary characteristics. They are the keys to designing an anthropomorphic robot hand, as illustrated in the high performance anthropomorphic Awiwi Hand presented in this book. This is not only a handbook for robot hand designers. It gives a comprehensive survey and analysis of the state of the art in robot hands as well as the human anatomy. It is also aimed at researchers and roboticists interested in the underlying functionalities of hands, grasping and manipulation. The methodology of functional abstraction is not limited to robot hands, it can also help realize a new generation of humanoid robots to accommodate a broader spectrum of the needs of human society.