1. Record Nr. UNINA9910555251603321

Autore	Yu Wen (Robotics engineer)
Titolo	Human-robot interaction control using reinforcement learning / / Wen Yu, Adolfo Perrusquia
Pubbl/distr/stampa	Hoboken, New Jersey : , : IEEE Press : , : Wiley, , [2022] ©2022
ISBN	1-119-78276-7 1-119-78277-5 1-119-78275-9
Descrizione fisica	1 online resource (289 pages)
Collana	IEEE Press series on systems science and engineering
Disciplina	629.8924019
Soggetti	Human-robot interaction Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright -- Contents -- Author Biographies -- List of Figures -- List of Tables -- Preface -- Part I Humanrobot Interaction Control -- Chapter 1 Introduction -- 1.1 HumanRobot Interaction Control -- 1.2 Reinforcement Learning for Control -- 1.3 Structure of the Book -- References -- Chapter 2 Environment Model of HumanRobot Interaction -- 2.1 Impedance and Admittance -- 2.2 Impedance Model for HumanRobot Interaction -- 2.3 Identification of HumanRobot Interaction Model -- 2.4 Conclusions -- References -- Chapter 3 Model Based HumanRobot Interaction Control -- 3.1 Task Space Impedance/Admittance Control -- 3.2 Joint Space Impedance Control -- 3.3 Accuracy and Robustness -- 3.4 Simulations -- 3.5 Conclusions -- References -- Chapter 4 Model Free HumanRobot Interaction Control -- 4.1 TaskSpace Control Using JointSpace Dynamics -- 4.2 TaskSpace Control Using TaskSpace Dynamics -- 4.3 Joint Space Control -- 4.4 Simulations -- 4.5 Experiments -- 4.6 Conclusions -- References -- Chapter 5 Humanintheloop Control Using Euler Angles -- 5.1 Introduction -- 5.2 JointSpace Control -- 5.3 TaskSpace Control -- 5.4 Experiments -- 5.5 Conclusions -- References -- Part II Reinforcement Learning for Robot Interaction