



Advances in telerobotics

/

Ferré, M.

Springer,
2007

Monografía

The main purpose of this book is to provide readers with recent advances in the field of Telerobotics. It describes methods, experimental results, applications, and developments, highly relevant for scientists, researchers, and students in Teleoperation. This book is structured in three parts: I. Human System Interfaces, II. Control, and III. Applications. Chapters in part I concentrate on human interface technology which allows a human operator to close the control loop of a remote robot. Topics related to control algorithms - in particular for the case with time delay in the communication network - are the focus in part II, concentrating on bilateral control methods. Part III presents a variety of advanced applications in surgery, space, and other fields relevant to everyday life. The book is complemented by a CD containing fifteen research videos, which make the contents of the book even more descriptive

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMzYwMzQwNTA>

Título: Advances in telerobotics edited by M. Ferre [and others]

Editorial: Berlin London Springer 2007

Descripción física: 1 online resource (xix, 500 pages) illustrations

Mención de serie: Springer tracts in advanced robotics v. 31

Documento fuente: Springer e-books

Bibliografía: Includes bibliographical references and index

Contenido: To Advances in Telerobotics -- to Advances in Telerobotics -- Human System Interfaces -- The Human Role in Telerobotics -- Design, Control, and Evaluation of a Hyper-redundant Haptic Device -- A Novel Parallel Haptic Interface for Telerobotic Systems -- Exoskeletons as Man-Machine Interface Systems for Teleoperation and Interaction in Virtual Environments -- Stereoscopic Image Visualization for Telerobotics. Experiments with Active Binocular Cameras -- Stereoscopic 3-D Acquisition, Processing, and Display for Telerobotic Applications -- User Voice Assistance Tool for Teleoperation -- Computer Vision Body Modeling for Gesture Based Teleoperation -- Enhanced Teleoperation Through Virtual Reality Techniques -- Control -- Bilateral Control Architectures for Telerobotics -- Experimental Results on Bilateral Control Using an Industrial Telemanipulator -- Human Perceived Transparency with Time Delay -- Environment Estimation in Teleoperation Systems -- Power Scaling in Port-Hamiltonian Telemanipulation over Packet Switched Networks -- Adaptive Synchronization of Bilateral Teleoperators with Time Delay -- Bilateral Control of Teleoperation Systems Through

State Convergence -- Re-configurable Control Scheme for Guiding Telerobotics -- Teleprogramming: Capturing the Intention of the Human Operator -- Applications -- DLR's Advanced Telerobotic Concepts and Experiments for On-Orbit Servicing -- Underwater Telerobotics for Collaborative Research -- Robot Assisted Force Feedback Surgery -- Telerobotic Control by Virtual Fixtures for Surgical Applications -- Technologies for a Telesurgery Laboratory Implementation -- Proprio and Teleoperation of a Robotic System for Disabled Persons' Assistance in Domestic Environments -- Internet-Based Tele-Laboratory: Remote Experiments Using the SNRP Distributed Network Architecture -- Force Reflecting Teleoperation Via IPv6 Protocol with Geometric Constraints Haptic Guidance -- Telerobotics for Aerial Live Power Line Maintenance -- Advanced Telerobotics: Dual-Handed and Mobile Remote Manipulation

Restricciones de acceso: University staff and students only. Requires University Computer Account login off-campus

Lengua: English

Copyright/Depósito Legal: 177508162 227334476 316684942 607262263 613462065 648320840 741248004
756427555 814505320 1005781958 1035706340 1044324817 1050968667 1056310550 1058091375 1060817392
1060871988 1069460818 1075541552 1078026681 1086807824 1112580533 1126488696 1162780407
1204032248 1335734058 1391785980 1413280987

ISBN: 9783540713647 3540713646 3540713638 hbk.) 9783540713630 hbk.) 1280969865 9781280969867
9786610969869 6610969868

Materia: Robotics Robotique Ingénierie Robotics

Autores: Ferré, M.

Enlace a formato físico adicional: Print version Advances in telerobotics. Berlin ; London : Springer, 2007
9783540713630 3540713638 (DLC) 2007925206 (OCOlc)137313799

Punto acceso adicional serie-Título: Springer tracts in advanced robotics v. 31

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es