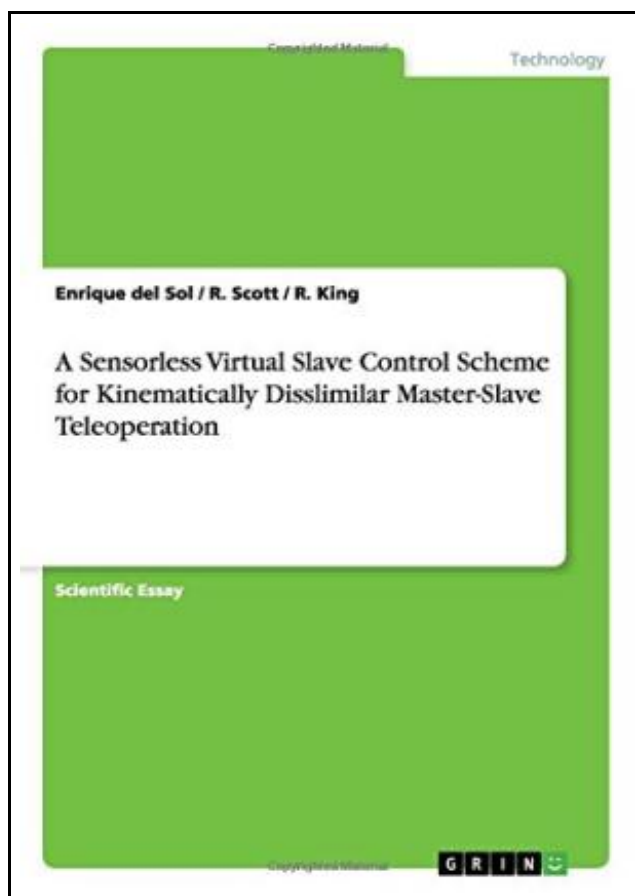# A Sensorless Virtual Slave Control Scheme for Kinematically Disslimilar Master-Slave Teleoperation

Filesize: 4.42 MB

Reviews

The best pdf i ever study. We have go through and so i am confident that i will gonna study again once again down the road. You are going to like the way the blogger compose this pdf.
(Marcus Hills)

A SENSORLESS VIRTUAL SLAVE CONTROL SCHEME FOR KINEMATICALLY DISSLIMILAR MASTER-SLAVE TELEOPERATION

GRIN Verlag Okt 2015, 2015. Taschenbuch. Book Condition: Neu. 210x148x2 mm. This item is printed on demand - Print on Demand Neuware - Scientific Essay from the year 2012 in the subject Engineering - Robotics, Universidad Politécnica de Madrid, language: English, abstract: This paper is organised as follows: section 2 summarises the remote handling issues in the design of control rooms for teleoperating dissimilar master-slave bilateral systems, section 3 covers the radiation tolerance of robotics systems with special attention to force sensors, in section 4 the sensorless virtual slave architecture is explained and the theory behind the sensorless force feedback is discussed. Section 5 details the experimental equipment used in this research while in section 6 we present the results obtained in 1 degree of freedom. Finally in 7 we present the conclusions and future applications of this technique in multiple degrees of freedom. The use of telerobotic systems is essential for remote handling (RH) operations in radioactive areas of scientific facilities that generate high doses of radiation. Recent developments in remote handling technology has seen a great deal of effort being directed towards the design of modular remote handling control rooms equipped with a standard master arm which will be used to separately control a range of different slave devices. This application thus requires a kinematically dissimilar master-slave control scheme. In order to avoid drag and other effects such as friction or other non-linear and unmodelled slave arm effects of the common position-position architecture in nonbackdrivable slaves, this research has implemented a force position control scheme. End-effector force is derived from motor torque values which, to avoid the use of radiation intolerant and costly sensing devices, are inferred from motor current measurement. This has been demonstrated on a 1-DOF test-rig with a permanent magnet synchronous motor teleoperated by a...

📄 Read A Sensorless Virtual Slave Control Scheme for Kinematically Disslimilar Master-Slave Teleoperation Online

📄 Download PDF A Sensorless Virtual Slave Control Scheme for Kinematically Disslimilar Master-Slave Teleoperation

See Also

Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

Save Document »

Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

Save Document »

New KS2 English SAT Buster 10-Minute Tests: 2016 SATs & Beyond

Paperback. Book Condition: New. Not Signed; This is Book 2 of CGP's SAT Buster 10-Minute Tests for KS2 Grammar, Punctuation & Spelling - it's a brilliant way to introduce English SATS preparation in bite-sized chunks....

Save Document »

Tinga Tinga Tales: Why Lion Roars - Read it Yourself with Ladybird

Paperback. Book Condition: New. Not Signed; This is a Tinga Tinga tale inspired by traditional stories from Africa. Lion is king of Tinga Tinga but he can't roar! Can his friend Flea help Lion to...

Save Document »

Have You Locked the Castle Gate?

Addison-Wesley Professional. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Is your computer safe Could an intruder sneak in and steal...

Save Document »