Robot Control Using an Artificial Neural Network

Filesize: 4.9 MB

Reviews

Completely one of the best publication I have actually read. Indeed, it is perform, nonetheless an interesting and amazing literature. Your lifestyle span will likely be transform when you complete reading this book.

(Mrs. Agustina Kemmer V)

ROBOT CONTROL USING AN ARTIFICIAL NEURAL NETWORK

DOWNLOAD PDF

To save **Robot Control Using an Artificial Neural Network** PDF, make sure you click the hyperlink listed below and download the document or have access to additional information which might be relevant to ROBOT CONTROL USING AN ARTIFICIAL NEURAL NETWORK ebook.

Diplom.de. Paperback. Condition: New. 54 pages. Dimensions: 10.4in. x 7.4in. x 0.1in.Diplomarbeit, die am 31. 05. 1997 erfolgreich an einer Fachhochschule in Deutschland im Fachbereich Allgemeiner Maschinenbau eingereicht wurde. Abstract: The aim of the project was to control three joints of an industrial robot in terms of its position, velocity and acceleration. The work considered the necessary hardware, principles of neural networks and controlling techniques. The hardware comprised of a robot with three DC-motors and three optical position encoders, a personal computer with a DA card for voltage output to the robot and two DD cards. One DD card for receiving values from the optical encoders and one for timing. The basics of artificial neural network type perceptrons were described. The special features bias, output feedback, momentum term, adjustment of momentum factor and adjustment of learning rate for this artificial neural network type were considered. An introduction to learning and control structures using artificial neural networks were given. These were controller copying, direct modelling, direct inverse modelling, control with a model and an inverse model, forward and inverse modelling, control action feedback error learning, feedback error learning, learning and control using the plants Jacobian. The conversion of two learning and control structures, direct inverse modelling and control action feedback error learning, was implemented in software using MS QuickBASIC 4. 5. One joint was controlled with a direct inverse model. One joint and all joints together were controlled with control action feedback error learning. The results of experiments with these learning and control structures were documented. Table of Contents: 1. Introduction8 2. The hardware9 2. 1The robot9 2. 2The computer and the software11 2. 3The PCL-726 DA card11 2. 4The DD card11 2. 5The PCL-812 DD card12 2. 6The G64 rack12 3. Neural networks13 3. 1The neuron13 3. 2Conversion of neural...

Read Robot Control Using an Artificial Neural Network Online
Download PDF Robot Control Using an Artificial Neural Network

Other eBooks

[PDF] Design and Deliver: Planning and Teaching Using Universal Design for Learning
Follow the hyperlink beneath to download "Design and Deliver: Planning and Teaching Using Universal Design for Learning" PDF document.
Read ePub »

[PDF] RCadvisor s Modifly: Design and Build From Scratch Your Own Modern Flying Model Airplane In One Day for Just
Follow the hyperlink beneath to download "RCadvisor s Modifly: Design and Build From Scratch Your Own Modern Flying Model Airplane In One Day for Just " PDF document.
Read ePub »

[PDF] Joey Green's Rainy Day Magic: 1258 Fun, Simple Projects to Do with Kids Using Brand-name Products
Follow the hyperlink beneath to download "Joey Green's Rainy Day Magic: 1258 Fun, Simple Projects to Do with Kids Using Brand-name Products" PDF document.
Read ePub »

[PDF] Learning with Curious George Preschool Math
Follow the hyperlink beneath to download "Learning with Curious George Preschool Math" PDF document.
Read ePub »

[PDF] Learning with Curious George Preschool Reading
Follow the hyperlink beneath to download "Learning with Curious George Preschool Reading" PDF document.
Read ePub »

[PDF] Educating Young Children : Active Learning Practices for Preschool and Child Care Programs
Follow the hyperlink beneath to download "Educating Young Children : Active Learning Practices for Preschool and Child Care Programs" PDF document.
Read ePub »