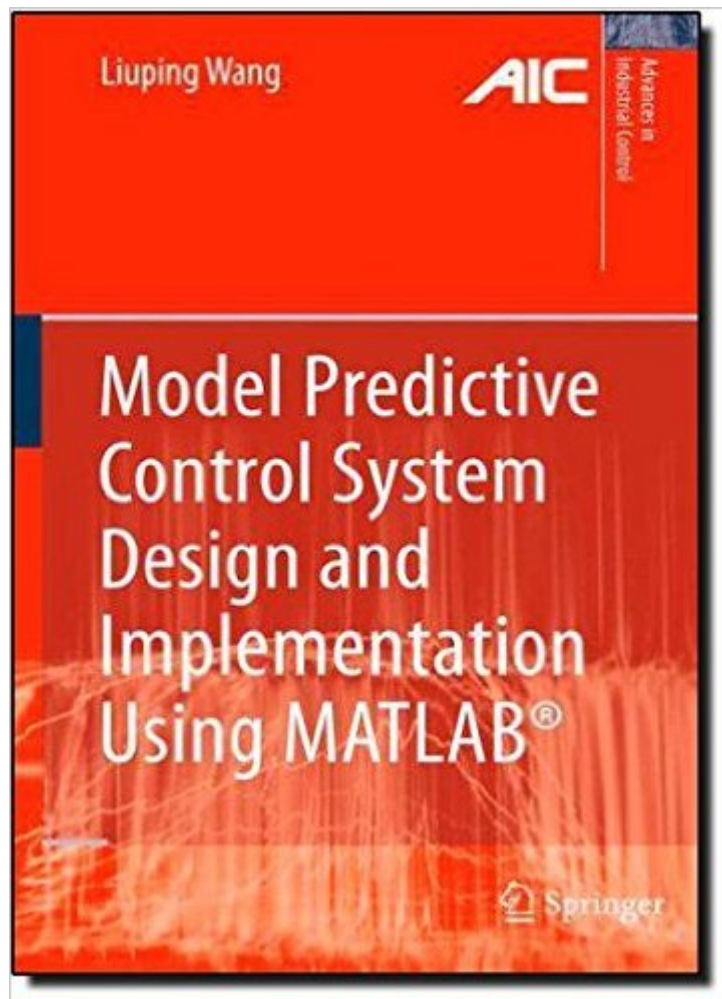


The book was found

Model Predictive Control System Design And Implementation Using MATLAB® (Advances In Industrial Control)



Synopsis

Model Predictive Control System Design and Implementation Using MATLAB® proposes methods for design and implementation of MPC systems using basis functions that confer the following advantages: - continuous- and discrete-time MPC problems solved in similar design frameworks; - a parsimonious parametric representation of the control trajectory gives rise to computationally efficient algorithms and better on-line performance; and - a more general discrete-time representation of MPC design that becomes identical to the traditional approach for an appropriate choice of parameters. After the theoretical presentation, coverage is given to three industrial applications. The subject of quadratic programming, often associated with the core optimization algorithms of MPC is also introduced and explained. The technical contents of this book is mainly based on advances in MPC using state-space models and basis functions. This volume includes numerous analytical examples and problems and MATLAB® programs and exercises.

Book Information

Series: Advances in Industrial Control

Hardcover: 378 pages

Publisher: Springer; 2009 edition (March 4, 2009)

Language: English

ISBN-10: 1848823304

ISBN-13: 978-1848823303

Product Dimensions: 6.4 x 1 x 9.4 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â Â See all reviews Â (1 customer review)

Best Sellers Rank: #1,469,967 in Books (See Top 100 in Books) #91 in Â Books > Computers &

Technology > Hardware & DIY > Microprocessors & System Design > Control Systems #514

in Â Books > Science & Math > Chemistry > Industrial & Technical #751 in Â Books > Computers &

Technology > Computer Science > Robotics

Customer Reviews

excellent text on MPC/Matlab!!

[Download to continue reading...](#)

Model Predictive Control System Design and Implementation Using MATLAB® (Advances in Industrial Control) Wind Turbine Control Systems: Principles, Modelling and Gain Scheduling

Design (Advances in Industrial Control) VOICED BASED SMART ELEVATOR SYSTEM: Using PIC 16F877A Microcontroller and MATLAB® Evaluation of Industrial Disability: Prepared by the Committee of the California Medical Association and Industrial Accident Commission of the State ... of Joint Measures in Industrial Injury Cases. Survey of Big Data Analysis Using Predictive Analytics Algorithms and Its Use Industrial Network Security, Second Edition: Securing Critical Infrastructure Networks for Smart Grid, SCADA, and Other Industrial Control Systems Industrial Network Security: Securing Critical Infrastructure Networks for Smart Grid, SCADA, and Other Industrial Control Systems Cyber-security of SCADA and Other Industrial Control Systems (Advances in Information Security) The Design and Implementation of the 4.4 BSD Operating System (Addison-Wesley UNIX and Open Systems Series) The Design and Implementation of the FreeBSD Operating System (2nd Edition) Applied Abstract Algebra with Maple™ and MATLAB®, Third Edition: A Maple and MATLAB Approach, Third Edition (Textbooks in Mathematics) Magnetics, Dielectrics, and Wave Propagation with MATLAB® Codes Signals and Systems: A Primer with MATLAB® Real-Time Digital Signal Processing from MATLAB® to C with the TMS320C6x DSPs, Second Edition Digital Signal Processing with Examples in MATLAB®, Second Edition (Electrical Engineering & Applied Signal Processing Series) Industrial Fluid Power, Vol. 1: Basic Text on Hydraulics, Air & Vacuum for Industrial and Mobile Applications Refrigeración comercial, doméstica, industrial y aire acondicionado / Commercial refrigeration, domestic, industrial and air conditioning (Spanish Edition) Manual de mantenimiento eléctrico industrial / Industrial electrical maintenance manual (Spanish Edition) Instrumentación Industrial (Instrumentacion Industrial) (Spanish Edition) Instrumentación Industrial (Curso de Instrumentacion Industrial) (Spanish Edition)

[Dmca](#)