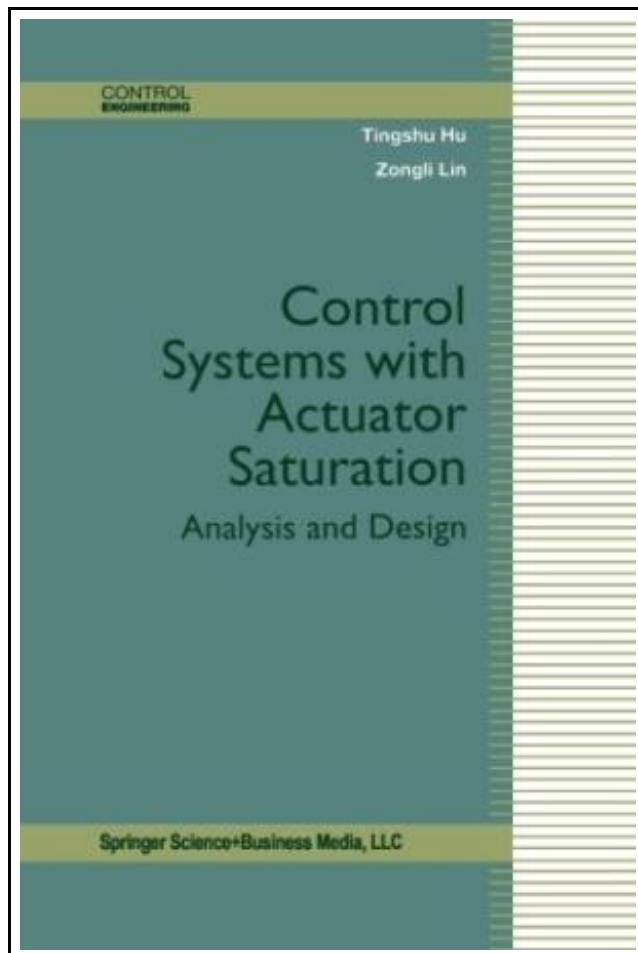


Control Systems with Actuator Saturation: Analysis and Design



Filesize: 6.91 MB

Reviews

This publication is fantastic. It is one of the most amazing publication i have got study. I am just pleased to explain how this is actually the best pdf i have got read through in my individual lifestyle and could be the finest publication for possibly.

(Mr. Kristoffer Hills)

CONTROL SYSTEMS WITH ACTUATOR SATURATION: ANALYSIS AND DESIGN

[DOWNLOAD PDF](#)

Springer-Verlag New York Inc., United States, 2013. Paperback. Book Condition: New. 235 x 155 mm. Language: English . Brand New Book. Saturation nonlinearities are ubiquitous in engineering systems. In control systems, every physical actuator or sensor is subject to saturation owing to its maximum and minimum limits. A digital filter is subject to saturation if it is implemented in a finite word length format. Saturation nonlinearities are also purposely introduced into engineering systems such as control systems and neural network systems. Regardless of how saturation arises, the analysis and design of a system that contains saturation nonlinearities is an important problem. Not only is this problem theoretically challenging, but it is also practically imperative. This book intends to study control systems with actuator saturation in a systematic way. It will also present some related results on systems with state saturation or sensor saturation. Roughly speaking, there are two strategies for dealing with actuator saturation. The first strategy is to neglect the saturation in the first stage of the control design process, and then to add some problem-specific schemes to deal with the adverse effects caused by saturation. These schemes, known as anti-windup schemes, are typically introduced using ad hoc modifications and extensive simulations. The basic idea behind these schemes is to introduce additional feedbacks in such a way that the actuator stays properly within its limits. Most of these schemes lead to improved performance but poorly understood stability properties. Softcover reprint of the original 1st ed. 2001.

[Read Control Systems with Actuator Saturation: Analysis and Design Online](#)[Download PDF Control Systems with Actuator Saturation: Analysis and Design](#)

Related Books



The Birds Christmas Carol

BOOK JUNGLE, United States, 2009. Paperback. Book Condition: New. 235 x 190 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin was an American children s author and educator. She...

[Save ePub »](#)



Mother Stories

Bluewater Publications, United States, 2010. Paperback. Book Condition: New. Sarah Noble-ives (illustrator). 235 x 191 mm. Language: English . Brand New Book ***** Print on Demand *****.I have endeavored to write, for mothers and dear...

[Save ePub »](#)



Mother Carey s Chickens

BOOK JUNGLE, United States, 2010. Paperback. Book Condition: New. 235 x 191 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin was an American children s author and educator. She...

[Save ePub »](#)



Homespun Tales

BOOK JUNGLE, United States, 2009. Paperback. Book Condition: New. 235 x 190 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin was an American children s author and educator. She...

[Save ePub »](#)



The Flag-Raising

BOOK JUNGLE, United States, 2010. Paperback. Book Condition: New. 235 x 190 mm. Language: English . Brand New Book ***** Print on Demand *****.Kate Douglas Wiggin was an American children s author and educator. She...

[Save ePub »](#)