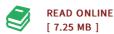




Computer-aided Nonlinear Control System Design: Using Describing Function Models (Paperback)

By Amir Nassirharand

Springer London Ltd, United Kingdom, 2014. Paperback. Condition: New. 2012 ed.. Language: English . Brand New Book ****** Print on Demand *****. A systematic computer-aided approach provides a versatile setting for the control engineer to overcome the complications of controller design for highly nonlinear systems. Computer-aided Nonlinear Control System Design provides such an approach based on the use of describing functions. The text deals with a large class of nonlinear systems without restrictions on the system order, the number of inputs and/or outputs or the number, type or arrangement of nonlinear terms. The strongly software-oriented methods detailed facilitate fulfillment of tight performance requirements and help the designer to think in purely nonlinear terms, avoiding the expedient of linearization which can impose substantial and unrealistic model limitations and drive up the cost of the final product. Design procedures are presented in a step-by-step algorithmic format each step being a functional unit with outputs that drive the other steps. This procedure may be easily implemented on a digital computer with example problems from mechatronic and aerospace design being used to demonstrate the techniques discussed. The author's commercial MATLAB (R)-based environment, available separately from insert URL here, can be used to create simulations showing...



Reviews

This book is really gripping and fascinating. I was able to comprehended every little thing out of this published e pdf. Your life span will likely be transform when you full looking at this ebook.

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