

Practical Grey-box Process Identification: Theory and Applications (Advances in **Industrial Control)**

By Torsten P. Bohlin



Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin

This book reviews the theoretical fundamentals of grey-box identification and puts the spotlight on MoCaVa, a MATLAB-compatible software tool, for facilitating the procedure of effective grey-box identification. It demonstrates the application of MoCaVa using two case studies drawn from the paper and steel industries. In addition, the book answers common questions which will help in building accurate models for systems with unknown inputs.



Download Practical Grey-box Process Identification: Theory ...pdf



Read Online Practical Grey-box Process Identification: Theor ...pdf

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control)

By Torsten P. Bohlin

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control)By Torsten P. Bohlin

This book reviews the theoretical fundamentals of grey-box identification and puts the spotlight on MoCaVa, a MATLAB-compatible software tool, for facilitating the procedure of effective grey-box identification. It demonstrates the application of MoCaVa using two case studies drawn from the paper and steel industries. In addition, the book answers common questions which will help in building accurate models for systems with unknown inputs.

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin Bibliography

Sales Rank: #5881126 in Books
Published on: 2006-07-05
Original language: English

• Number of items: 1

• Dimensions: 9.21" h x .88" w x 6.14" l, 1.65 pounds

• Binding: Hardcover

• 351 pages



Read Online Practical Grey-box Process Identification: Theor ...pdf

Download and Read Free Online Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin

Editorial Review

From the Back Cover

In process modelling, knowledge of the process under consideration is typically partial with significant unknown inputs (disturbances) to the model. Disturbances militate against the desirable trait of model reproducibility. "Grey-box" identification can assist, in these circumstances, by taking advantage of the two sources of information that may be available: any invariant prior knowledge and response data from experiments.

Practical Grey-box Process Identification is a three-stranded response to the following questions which are frequently raised in connection with grey-box methods:

- How much of my prior knowledge is useful and even correct in this environment?
- Are my experimental data sufficient and relevant?
- What do I do about the disturbances that I can't get rid of?
- How do I know when my model is good enough?

The first part of the book is a short review of the theoretical fundamentals of grey-box identification, focussing particularly on the theory necessary for the software presented in the second part. Part II puts the spotlight on MoCaVa, a MATLAB®-compatible software tool, downloadable from springeronline.com, for facilitating the procedure of effective grey-box identification. Part III demonstrates the application of MoCaVa using two case studies drawn from the paper and steel industries. More advanced theory is laid out in an appendix and the MoCaVa source code enables readers to expand on its capabilities to their own ends.

Practical Grey-box Process Identification will be of great interest and help to process control engineers and researchers and the software show-cased here will be of much practical assistance to students doing project work in this field.

Advances in Industrial Control aims to report and encourage the transfer of technology in control engineering. The rapid development of control technology has an impact on all areas of the control discipline. The series offers an opportunity for researchers to present an extended exposition of new work in all aspects of industrial control.

About the Author

Professor (emeritus) Torsten Bohlin has been employed in the following capacities:

1963 - 1971 at the IBM Nordic Laboratories as Research Engeneer working with computerized industrial process ontrol.

1971 appointed (by the king) Professor of the chair of Automatic Control at Linkeping Technical Institute.

1972 - 1996 Professor in Automatic Control at the Royal Institute of Tecknology (KTH) in Stockholm.

1972 - 1988 Head of the Department of Automatic Control,

Member of the board of the school of Technical Physics, and Member of the faculty of KTH.

Member of the Swedish IFAC comittee, TFF (national), and IEEE

Reviewer 66 times

Users Review

From reader reviews:

Henry Barba:

In this 21st hundred years, people become competitive in every way. By being competitive right now, people have do something to make them survives, being in the middle of the particular crowded place and notice simply by surrounding. One thing that oftentimes many people have underestimated it for a while is reading. Yes, by reading a publication your ability to survive enhance then having chance to endure than other is high. To suit your needs who want to start reading any book, we give you this kind of Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) book as basic and daily reading book. Why, because this book is greater than just a book.

Kathleen Owens:

Here thing why this particular Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) are different and trustworthy to be yours. First of all studying a book is good but it really depends in the content of it which is the content is as tasty as food or not. Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) giving you information deeper including different ways, you can find any publication out there but there is no e-book that similar with Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control). It gives you thrill studying journey, its open up your own personal eyes about the thing which happened in the world which is possibly can be happened around you. You can bring everywhere like in park, café, or even in your technique home by train. In case you are having difficulties in bringing the branded book maybe the form of Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) in e-book can be your alternate.

Carol McElroy:

The feeling that you get from Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) will be the more deep you excavating the information that hide within the words the more you get enthusiastic about reading it. It doesn't mean that this book is hard to recognise but Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) giving you joy feeling of reading. The article writer conveys their point in specific way that can be understood by anyone who read the item because the author of this book is well-known enough. This specific book also makes your own personal vocabulary increase well. Making it easy to understand then can go with you, both in printed or e-book style are available. We suggest you for having that Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) instantly.

Peggy Elmore:

What is your hobby? Have you heard that will question when you got students? We believe that that problem was given by teacher on their students. Many kinds of hobby, All people has different hobby. Therefore you know that little person just like reading or as reading become their hobby. You should know that reading is very important and book as to be the thing. Book is important thing to incorporate you knowledge, except your teacher or lecturer. You find good news or update in relation to something by book. Many kinds of books that can you go onto be your object. One of them are these claims Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control).

Download and Read Online Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin #P5VL3C2IRFZ

Read Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin for online ebook

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin books to read online.

Online Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin ebook PDF download

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin Doc

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin Mobipocket

Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin EPub

P5VL3C2IRFZ: Practical Grey-box Process Identification: Theory and Applications (Advances in Industrial Control) By Torsten P. Bohlin