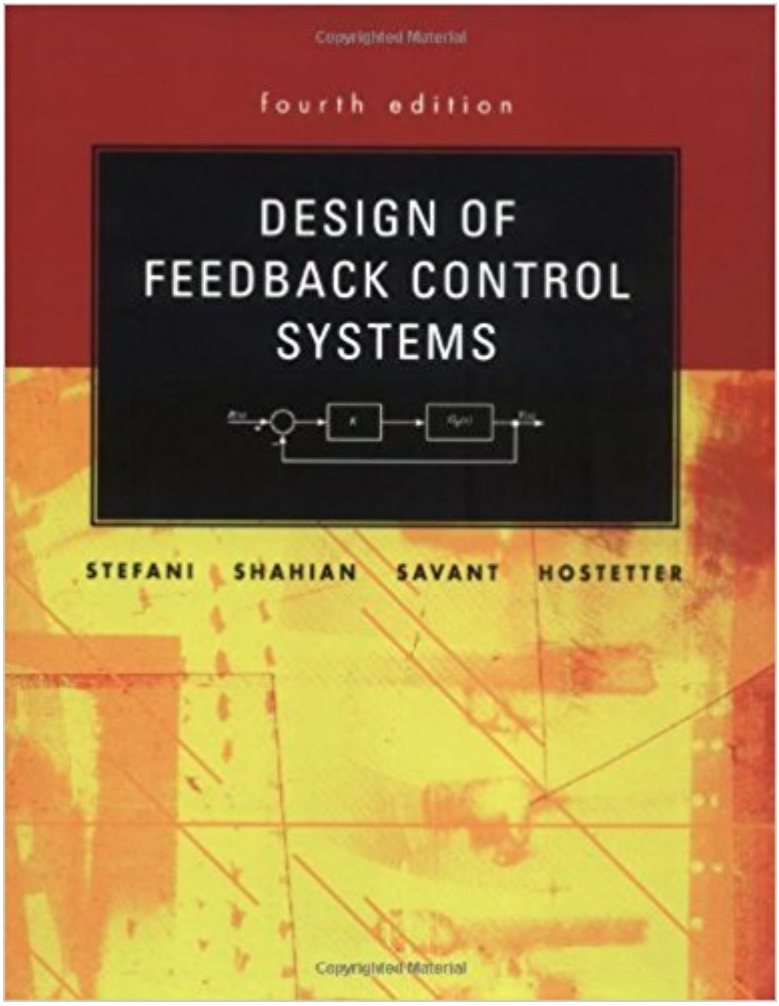
Design Of Feedback Control Systems (Oxford Series In Electrical And Computer Engineering)



Synopsis

Design of Feedback Control Systems is designed for electrical and mechanical engineering students in advanced undergraduate control systems courses. Now in its fourth edition, this tutorial-style textbook has been completely updated to include the use of modern analytical software, especially MATLABÃ Â®. It thoroughly discusses classical control theory and state variable control theory, as well as advanced and digital control topics. Each topic is preceded by analytical considerations that provide a well-organized parallel treatment of analysis and design. Design is presented in separate chapters devoted to root locus, frequency domain, and state space viewpoints. Treating the use of computers as a means rather than as an end, this student-friendly book contains new "Computer-Aided Learning" sections that demonstrate how MATLABÃ Â® can be used to verify all figures and tables in the text. Clear and accessible, Design of Feedback Control Systems, Fourth Edition, makes complicated methodology comprehensible to a wide spectrum of students.FeaturesÃ Â Keyed to today's dominant design tool, MATLABÃ Â®Ã Â Includes drill problems for gauging knowledge and skills after each topicÃ Â Provides state-of-the-art design examplesÃ Â Uses marginal summaries to guide the readerÃ Â Introduces new ideas in the context of previous material, with a guide to the information that followsÃ Â Presents practical examples of the latest advances in control sciences

Book Information

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Customer Reviews

"An excellent text book that explains the basic concepts to the beginner in a very lucid way, yet goes on to cover many advanced topics in sufficient detail."--Ajeet Singh, DeVry Technical Institute

Raymond T. Stefani, Bahram Shahian, and Gene Hostetter are all at California State University, Long Beach.

the math is stronger here hardly any theory to balance it out this book is only good if your teacher is using it as a supplemental resource to his lessons and not teaching from it because the stronger your mathematical foundation the more useless this book becomes, not student friendley either in regards o navigating through the material.dissapointment

This book contains numerous errors that need to be fixed. Some of the errors are not so obvious to a student taking this type of course for the first time. No assigned homework in the course so the students find out the errors when the y get their test back.

This is supposed to be an introductory text in classical control systems, but it skips over some fundamental concepts that should be at least reviewed. It’s a little bit better than Dorf & Bishop, but I think I prefer Nise’s book. It does offer lots of drills throughout the sections and many problems at the end of the chapters, but the drills aren’t worked out.

This book is a very well written text intended for students. It has a good number of drills with answers that checks your learning at every step. Every chapter has detailed interesting applications. It has the most complete treatment of inverted pendulum problems not available in any book. It also has the simplest treatment of advanced state space topics along with robust control. You will not find a simpler treatment of robust control in any other book. It has a balanced treatment of classical and modern control. Most books just show you a step response in state space design. This book shows root locus and Bode plots of state space design problems and clearly links the two sides. Other books follow the treatment of this great book. The only shortcoming is a lack of nonlinear analysis and a weak digital control treatment. But for continuous linear systems this is a great book to learn from. It is also great for self study.

I can’t even begin to imagine what the first three editions of this book were like... This book has many errors in it including answers to examples and drill problems. In addition, there are so few

useful examples and in those examples, steps are often skipped and the answer magically appears with no good explanation at all. In the time that I've been a student at university, I have never encountered such a terrible book. The lack of examples and coherent language really makes this book a waste of paper. You better hope you have a good professor if you use this book.

This is not a typical textbook that explains the theory then examples. It has a lot of examples with brief explanations.

Great book for engineers

exactly what I wanted

Engineering)