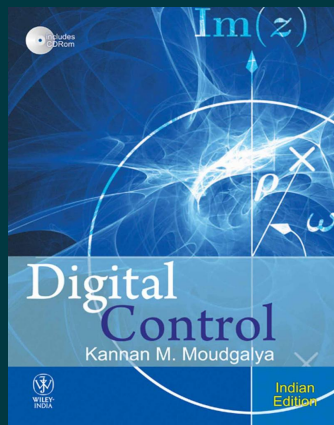




Digital Control

By Kannan M. Moudgalya

Paperback

9788126522064

₹1,550.00

Pages: 568

Description

This book is about the design of digital controllers. An attempt has been made to present digital control from scratch. The book is organized into five parts. The first deals with modeling, the second concerned with the topic of signal processing, the third devoted to identification of plants from measurements, fourth section looks at the transfer function approach to control design and the last section is devoted to state space techniques for control design. The topics of observers, Kalman filter and combined controller and observer have also been included.

About the Author

Kannan M. Moudgalya

Professor Kannan M. Moudgalya is an associate Dean at the Indian Institute of Technology in Bombay. He graduated in 1985 with a PhD in Chemical Engineering from Rice University

Table of Contents

Preface.

Acknowledgements.

List of Matlab Code.

List of Acronyms.

1. Introduction.

2. Modelling of Sampled Data Systems.

I: Digital Signal Processing.

3. Linear System.

4. Z-Transform.

5. Frequency Domain Analysis.

II: Identification.

6. Identification.

III: Transfer Function Approach to Controller Design.

7. Structures and Specifications.

8. Proportional, Integral, Derivative Controllers.

9. Pole Placement Controllers.

10. Special Cases of Pole Placement Control.

11. Minimum Variance Control.

12. Model Predictive Control.

13. Linear Quadratic Gaussian Control.

IV: State Space Approach to controller Design.

14. State Space Techniques in Controller Design.

Appendix A. Supplementary Material.

References.

Index.

Index of Matlab Code.

To purchase this product, please visit:

<https://www.wileyindia.com/digital-control.html>



Scan to buy