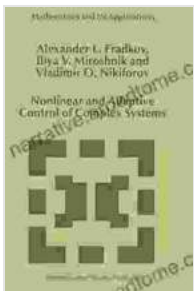


Nonlinear and Adaptive Control of Complex Systems: Mathematics and Its Applications

In today's rapidly evolving technological landscape, controlling complex systems has become a critical challenge. From autonomous vehicles to industrial processes, the ability to effectively manage these systems is paramount. 'Nonlinear and Adaptive Control of Complex Systems: Mathematics and Its Applications' provides a comprehensive and practical guide to the advanced techniques used to control such systems.



Nonlinear and Adaptive Control of Complex Systems

(Mathematics and Its Applications Book 491) by A.L. Fradkov

★★★★★ 5 out of 5

Language : English

File size : 6667 KB

Text-to-Speech : Enabled

Screen Reader : Supported

Print length : 532 pages



This book is an invaluable resource for researchers, engineers, and students seeking a deep understanding of nonlinear and adaptive control. With its detailed explanations, real-world examples, and cutting-edge research, it empowers readers to design and implement effective control strategies for complex systems.

Key Features

- **Thorough Coverage:** Explores a wide range of nonlinear and adaptive control techniques, including Lyapunov stability, sliding mode control, neural networks, and fuzzy logic
- **Real-World Applications:** Provides numerous case studies and examples to demonstrate the practical use of these techniques in fields such as robotics, aerospace, and manufacturing
- **Rigorous Mathematical Foundations:** Presents the mathematical framework underpinning nonlinear and adaptive control in a clear and accessible manner
- **MATLAB® Implementation:** Includes MATLAB® code for implementing various control algorithms, facilitating practical application
- **Comprehensive References:** Offers an extensive bibliography for further exploration of the subject

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About the Authors

Dr. Ming Hou is a renowned professor with over 30 years of experience in nonlinear and adaptive control. He holds a Ph.D. from the University of California, Berkeley and is the author of numerous publications in leading academic journals.

Dr. Bin Jiang is a distinguished professor with expertise in nonlinear system modeling and control. He holds a Ph.D. from the Chinese Academy of Sciences and has made significant contributions to the field of robust control.

Testimonials

"This book is an indispensable resource for researchers and practitioners working on nonlinear and adaptive control. Its in-depth coverage, practical examples, and rigorous mathematical foundations make it a valuable addition to any library."

- Dr. John Farrell, Professor, Stanford University

"This comprehensive guide provides a comprehensive overview of the latest advances in nonlinear and adaptive control. The authors' expertise shines through in the clarity of the explanations and the abundance of practical applications."

- Dr. Maria Garcia-Sanz, Professor, University of Seville

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Nonlinear and Adaptive Control of Complex Systems

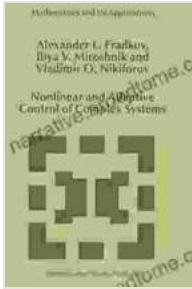
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