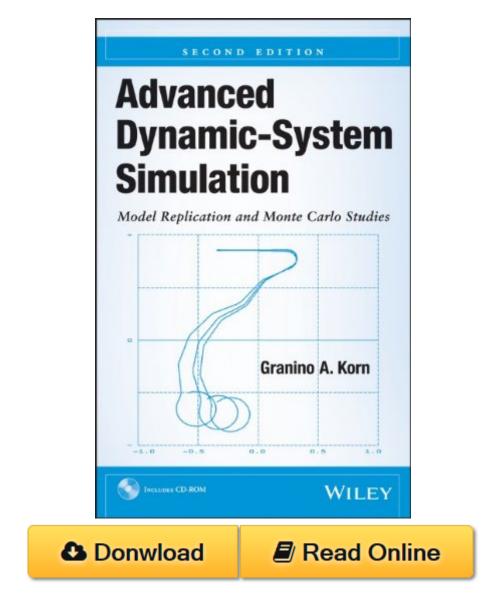
Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies PDF



Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies by Granino A. Korn ISBN 1118397355

A unique, hands-on guide to interactive modeling and simulation of engineering systems

This book describes advanced, cutting-edge techniques for dynamic system simulation using the DESIRE modeling/simulation software package. It offers detailed guidance on how to implement the software, providing scientists and engineers with powerful tools for creating simulation scenarios and experiments for such dynamic systems as aerospace vehicles, control systems, or

biological systems.

Along with two new chapters on neural networks, *Advanced Dynamic-System Simulation, Second Edition* revamps and updates all the material, clarifying explanations and adding many new examples. A bundled CD contains an industrial-strength version of OPEN DESIRE as well as hundreds of program examples that readers can use in their own experiments. The only book on the market to demonstrate model replication and Monte Carlo simulation of real-world engineering systems, this volume:

- Presents a newly revised systematic procedure for difference-equation modeling
- Covers runtime vector compilation for fast model replication on a personal computer
- Discusses parameter-influence studies, introducing very fast vectorized statistics computation
- Highlights Monte Carlo studies of the effects of noise and manufacturing tolerances for controlsystem modeling
- Demonstrates fast, compact vector models of neural networks for control engineering
- Features vectorized programs for fuzzy-set controllers, partial differential equations, and agroecological modeling

Advanced Dynamic-System Simulation, Second Edition is a truly useful resource for researchers and design engineers in control and aerospace engineering, ecology, and agricultural planning. It is also an excellent guide for students using DESIRE.

Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies Review

This Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Advanced Dynamic-System Simulation: Model Replication and Monte Carlo Studies having great arrangement in word and layout, so you will not really feel uninterested in reading.