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Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1009 ; ; 86
Disciplina	519.3
Soggetti	Mathematical optimization System theory Operations research Decision making Optimization Systems Theory, Control Operations Research/Decision Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I: Optimization and Control Theory -- Chapter 1. Some Recent Developments in Systems and Control Theory on Infinite Dimensional Banach Spaces -- Chapter 2. Some Recent Developments in Systems and Control Theory on Infinite Dimensional Banach Spaces -- Chapter 3. A Class of History-dependent Inclusions with Applications to Contact Problems -- Chapter 4. On the Number of Solutions Generated by the Simplex Method for LP -- Chapter 5. Use of Approximations of Hamilton-Jacobi-Bellman Inequality for Solving Periodic Optimization Problems -- Chapter 6. On Proper Efficiency in Multi objective Semi-Infinite Optimization -- Chapter 7. Using Penalty in Mathematical Decomposition for Production-Planning to Accommodate Clearing Function Constraints of Capacity -- Part II: Techniques and Applications -- Chapter 8. Minimum Time Synchronization of Chaotic Systems via Numerical Optimal Control Techniques -- Chapter 9. The Uncorrelated and Discriminant Colour Space for Facial Expression Recognition -- Chapter 10. Admissibility Analyses for Dynamic Input-Output Economic

Models with Multiple Delays -- Chapter 11. Content Based Image Retrieval Using Local Directional Pattern and Color Histogram -- 12. Time-minimal Orbital Transfers to Temporarily-Captured Natural Earth Satellites -- 13. A Chaotic Particle Swarm Optimization Exploiting Snap-Back Repellers of a Perturbation-Based System -- 14. Modeling and Analysis of the Cyber Infrastructure for Vehicle Route Optimization.

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Sommario/riassunto

This book presents advances in state-of-the-art solution methods and their applications to real life practical problems in optimization, control and operations research. Contributions from world-class experts in the field are collated here in two parts, dealing first with optimization and control theory and then with techniques and applications. Topics covered in the first part include control theory on infinite dimensional Banach spaces, history-dependent inclusion and linear programming complexity theory. Chapters also explore the use of approximations of Hamilton-Jacobi-Bellman inequality for solving periodic optimization problems and look at multi-objective semi-infinite optimization problems, and production planning problems. In the second part, the authors address techniques and applications of optimization and control in a variety of disciplines, such as chaos synchronization, facial expression recognition and dynamic input-output economic models. Other applications considered here include image retrieval, natural earth satellites orbital transfers, snap-back repellers, and modern logistic systems. Readers will learn of advances in optimization, control, and operations research, as well as potential new avenues of research and development. The book will appeal to scientific researchers, mathematicians and all specialists interested in the latest advances in optimization and control. .

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