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Nota di contenuto	Contents; Foreword; Preface; Acknowledgments; 1. Mathematical Programming and its Applications in Finance L. C. Thomas; Abstract; 1.1 Introduction; 1.2 Portfolio Optimization; 1.3 Asset-liability Models; 1.4 Yield Curves; 1.5 Credit Scorecards; Bibliography; 2. Anti-stalling Pivot Rule for Linear Programs with Totally Unimodular Coefficient Matrix S. N. Kabadi and A. P. Punnen; Abstract; 2.1 Introduction; 2.2 Pivot Selection Rule; Bibliography; 3. A New Practically E cient Interior Point Method for Convex Quadratic Programming K. G. Murty; Abstract; 3.1 Introduction; 3.2 The Centering Strategy 3.3 Descent Step Using a Descent Direction 3.4 Descent Step Using the Touching Constraints; 3.5 The Algorithm; 3.6 Convergence Results; 3.7 The Case When the Matrix D is Not Positive Definite; Bibliography; 4. A General Framework for the Analysis of Sets of Constraints R. Caron and T. Traynor; Abstract; 4.1 Introduction; 4.2 The Set Covering Formulation; 4.3 Random Sampling; Acknowledgement; Bibliography; 5. Tolerance-based Algorithms for the Traveling Salesman Problem D. Ghosh, B. Goldengorin, G. Gutin and G. Jager; Abstract; 5.1 Introduction; 5.2 Some Relevant Concepts 5.2.1 The Relaxed Assignment Problem 5.2.2 Determining Tolerances

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	for AP and RAP; 5.2.3 The Contraction Procedure and a Greedy Algorithm; 5.3 Tolerance-based Greedy Algorithms; 5.4 Computational Experience; 5.5 Summary and Future Research Directions; Bibliography; 6. On the Membership Problem of the Pedigree Polytope T. S. Arthanari; Abstract; 6.1 Introduction; 6.1.1 Computational Complexity, Polytopes and Efficiency; 6.2 Preliminaries & Notations; 6.2.1 Rigid, Dummy arcs in a Capacited Transportation Problem; 6.2.2 Definition of the Pedigree Polytope 6.2.3 Multistage Insertion and Related Results 6.3 Polytopes and Efficiency; 6.3.0.1 Problems Related to Polytopes; 6.3.1 Properties of the Polytope, conv(An); 6.4 Construction of the Layered Network N; 6.5 Necessity of Fk Feasibility for Membership; 6.6 Pedigree Packability; 6.7 A Multicommodity Flow Problem to Check Member- ship; 6.8 Computational Complexity of Checking the Necessary Condition; 6.9 Concluding Remarks; Acknowledgements; Bibliography; 7. Exact Algorithms for a One-defective Vertex Colouring Problem N. Achuthan, N. R. Achuthan and R. Collinson; Abstract; 7.1 Introduction 7.2 Sequential Colouring Heuristics for k-DVCP7.3 Implicit Enumeration Algorithms; Acknowledgement; Bibliography; 8. Complementarity Problem involving a Vertical Block Matrix and its Solution using Neural Network Model S. K. Neogy, A. K. Das and P. Das; Abstract; 8.1 Introduction; 8.2 Preliminaries; 8.3 Main Results; 8.4 Computing VLCP Solution Using the Neural Network Dynamics; 8.4.1 Proposed Neural Network Dynamics; 8.5 Simulation Results; Bibliography 9. Fuzzy Twin Support Vector Machines for Pattern Classification R. Khemchandani, Jayadeva and S. Chandra
Sommario/riassunto	This edited book presents recent developments and state-of-the-art review in various areas of mathematical programming and game theory. It is a peer-reviewed research monograph under the ISI Platinum Jubilee Series on Statistical Science and Interdisciplinary Research. This volume provides a panoramic view of theory and the applications of the methods of mathematical programming to problems in statistics, finance, games and electrical networks. It also provides an important as well as timely overview of research trends and focuses on the exciting areas like support vector machines, bilevel