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of Solutions; 4.4 Linear Relaxations; 4.5 Extensions; 4.5.1 Extensions to countably many moment constraints; 4.5.2 Extension to several measures; 4.6 Exploiting Sparsity; 4.6.1 Sparse semidefinite relaxations; 4.6.2 Computational complexity; 4.7 Summary; 4.8 Exercises; 4.9 Notes and Sources; 4.10 Proofs; 4.10.1 Proof of Theorem 4.3; 4.10.2 Proof of Theorem 4.7; Part II Applications
5. Global Optimization over Polynomials
5.1 The Primal and Dual Perspectives; 5.2 Unconstrained Polynomial Optimization; 5.3 Constrained Polynomial Optimization: Semidefinite Relaxations; 5.3.1 Obtaining global minimizers; 5.3.2 The univariate case; 5.3.3 Numerical experiments; 5.3.4 Exploiting sparsity; 5.4 Linear Programming Relaxations; 5.4.1 The case of a convex polytope; 5.4.2 Contrasting LP and semidefinite relaxations.; 5.5 Global Optimality Conditions; 5.6 Convex Polynomial Programs; 5.6.1 An extension of Jensen's inequality; 5.6.2 The s.o.s.-convex case; 5.6.3 The strictly convex case
5.7 Discrete Optimization
5.7.1 Boolean optimization; 5.7.2 Back to unconstrained optimization; 5.8 Global Minimization of a Rational Function; 5.9 Exploiting Symmetry; 5.10 Summary; 5.11 Exercises; 5.12 Notes and Sources; 6. Systems of Polynomial Equations; 6.1 Introduction; 6.2 Finding a Real Solution to Systems of Polynomial Equations; 6.3 Finding All Complex and/or All Real Solutions: A Unified Treatment; 6.3.1 Basic underlying idea; 6.3.2 The moment-matrix algorithm; 6.4 Summary; 6.5 Exercises; 6.6 Notes and Sources; 7. Applications in Probability
7.1 Upper Bounds on Measures with Moment Conditions

Sommario/riassunto

Many important applications in global optimization, algebra, probability and statistics, applied mathematics, control theory, financial mathematics, inverse problems, etc. can be modeled as a particular instance of the *Generalized Moment Problem (GMP)*. This book introduces a new general methodology to solve the GMP when its data are polynomials and basic semi-algebraic sets. This methodology combines semidefinite programming with recent results from real algebraic geometry to provide a hierarchy of semidefinite relaxations converging to the desired optimal value. Applied on appropriate
