1. Record Nr. UNISA996465776403316

Titolo	Integer Programming and Combinatorial Optimization [[electronic resource]] : 18th International Conference, IPCO 2016, Liège, Belgium, June 1-3, 2016, Proceedings / / edited by Quentin Louveaux, Martin Skutella
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-33461-1
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIII, 412 p. 33 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9682
Disciplina	519.77
Soggetti	Numerical analysis Algorithms Computer science—Mathematics Discrete mathematics Computer networks Numerical Analysis Discrete Mathematics in Computer Science Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	On Approximation Algorithms for Concave Mixed-Integer QuadraticProgramming -- Centerpoints: A link between optimization and convex geometry -- Rescaled coordinate descent methods for Linear Programming -- Approximating Min-Cost Chain-Constrained Spanning Trees: A Reduction from Weighted to Unweighted Problems -- Max-Cut under Graph Constraints -- Sparsest cut in planar graphs, maximum concurrent ows and their connections with the max-cut problem -- Intersection Cuts for Bilevel Optimization -- Exact Algorithms for the Chance-Constrained Vehicle Routing Problem -- Extended Formulations in Mixed-integer Convex Programming -- k-Trails: Recognition, Complexity, and Approximations -- Better s-t-Tours by Gao Trees -- Popular Edges and Dominant Matchings -- Semidefinite and linear programming integrality gaps for scheduling

identical machines -- Stabilizing network bargaining games by blocking players -- Round Robin Tournaments Generated by the Circle Method have Maximum Carry-Over -- Extreme Functions with an Arbitrary Number of Slopes -- Minimal cut-generating functions are nearly extreme -- On the Mixed Binary Representability of Ellipsoidal Regions -- Constant Factor Approximation for ATSP with Two Edge Weights -- Improved Approximation Algorithms for Hitting 3-Vertex Paths -- Improved Approximations for Cubic Bipartite and Cubic TSP -- An approximation algorithm for Uniform Capacitated k-Median problem with 1 + capacity violation -- Valid Inequalities for Separable Concave Constraints with Indicator Variables -- A Polyhedral Approach to Online Bipartite Matching -- On Some Polytopes Contained in the 0,1 Hypercube that Have a Small Chvátal Rank -- Robust Monotone Submodular Function Maximization -- Maximizing Monotone Submodular Functions over the Integer Lattice -- Submodular Unsplittable Flow on Trees -- Strong reductions for extended formulations -- Sum-of-squares lower bounds for maximally symmetric formulations -- Sum-of-squares lower bounds for maximally symmetric formulations -- Deciding Emptiness of the Gomory-Chvátal Closure is NP-Complete, Even for a Rational Polyhedron Containing No Integer Point -- On the quantile cut closure of chance-constrained problems. .

Sommario/riassunto

This book constitutes the refereed proceedings of the 18th International Conference on Integer Programming and Combinatorial Optimization, IPCO 2016, held in Liège, Belgium, in June 2016. The 33 full papers presented were carefully reviewed and selected from 125 submissions. The conference is a forum for researchers and practitioners working on various aspects of integer programming and combinatorial optimization. The aim is to present recent developments in theory, computation, and applications in these areas. The scope of IPCO is viewed in a broad sense, to include algorithmic and structural results in integer programming and combinatorial optimization as well as revealing computational studies and novel applications of discrete optimization to practical problems.

2. Record Nr. UNINA9910141404103321

Titolo	Case studies in Bayesian statistical modelling and analysis [[electronic resource] /] / edited by Clair Alston, Kerrie Mengersen, and Anthony Pettitt
Pubbl/distr/stampa	Chichester, West Sussex, : John Wiley & Sons Inc., 2012
ISBN	1-118-39447-X 1-283-65634-5 1-118-39449-6
Edizione	[1st edition]
Descrizione fisica	1 online resource (499 p.)
Collana	Wiley Series in Probability and Statistics
Altri autori (Persone)	AlstonClair MengersenKerrie L PettittAnthony (Anthony N.)
Disciplina	519.5/42
Soggetti	Bayesian statistical decision theory Statistical decision
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 and index.
Nota di contenuto	Case Studies in Bayesian Statistical Modelling and Analysis; Contents; Preface; List of contributors; 1 Introduction; 1.1 Introduction; 1.2 Overview; 1.3 Further reading; 1.3.1 Bayesian theory and methodology; 1.3.2 Bayesian methodology; 1.3.3 Bayesian computation; 1.3.4 Bayesian software; 1.3.5 Applications; References; 2 Introduction to MCMC; 2.1 Introduction; 2.2 Gibbs sampling; 2.2.1 Example: Bivariate normal; 2.2.2 Example: Change-point model; 2.3 Metropolis-Hastings algorithms; 2.3.1 Example: Component-wise MH or MH within Gibbs; 2.3.2 Extensions to basic MCMC; 2.3.3 Adaptive MCMC 2.3.4 Doubly intractable problems2.4 Approximate Bayesian computation; 2.5 Reversible jump MCMC; 2.6 MCMC for some further applications; References; 3 Priors: Silent or active partners of Bayesian inference?; 3.1 Priors in the very beginning; 3.1.1 Priors as a basis for learning; 3.1.2 Priors and philosophy; 3.1.3 Prior chronology; 3.1.4 Pooling prior information; 3.2 Methodology I: Priors defined by mathematical criteria; 3.2.1 Conjugate priors; 3.2.2 Impropriety and hierarchical priors; 3.2.3 Zellner's g-prior for regression models; 3.2.4

Objective priors

3.3 Methodology II: Modelling informative priors3.3.1 Informative modelling approaches; 3.3.2 Elicitation of distributions; 3.4 Case studies; 3.4.1 Normal likelihood: Time to submit research dissertations; 3.4.2 Binomial likelihood: Surveillance for exotic plant pests; 3.4.3 Mixture model likelihood: Bioregionalization; 3.4.4 Logistic regression likelihood: Mapping species distribution via habitat models; 3.5 Discussion; 3.5.1 Limitations; 3.5.2 Finding out about the problem; 3.5.3 Prior formulation; 3.5.4 Communication; 3.5.5 Conclusion; Acknowledgements; References

4 Bayesian analysis of the normal linear regression model4.1 Introduction; 4.2 Case studies; 4.2.1 Case study 1: Boston housing data set; 4.2.2 Case study 2: Production of cars and station wagons; 4.3 Matrix notation and the likelihood; 4.4 Posterior inference; 4.4.1 Natural conjugate prior; 4.4.2 Alternative prior specifications; 4.4.3 Generalizations of the normal linear model; 4.4.4 Variable selection; 4.5 Analysis; 4.5.1 Case study 1: Boston housing data set; 4.5.2 Case study 2: Car production data set; References; 5 Adapting ICU mortality models for local data: A Bayesian approach

5.1 Introduction5.2 Case study: Updating a known risk-adjustment model for local use; 5.3 Models and methods; 5.4 Data analysis and results; 5.4.1 Updating using the training data; 5.4.2 Updating the model yearly; 5.5 Discussion; References; 6 A Bayesian regression model with variable selection for genome-wide association studies; 6.1 Introduction; 6.2 Case study: Case-control of Type 1 diabetes; 6.3 Case study: GENICA; 6.4 Models and methods; 6.4.1 Main effect models; 6.4.2 Main effects and interactions; 6.5 Data analysis and results; 6.5.1 WTCCC TID; 6.5.2 GENICA; 6.6 Discussion

Acknowledgements

Sommario/riassunto

Provides an accessible foundation to Bayesian analysis using real world models This book aims to present an introduction to Bayesian modelling and computation, by considering real case studies drawn from diverse fields spanning ecology, health, genetics and finance. Each chapter comprises a description of the problem, the corresponding model, the computational method, results and inferences as well as the issues that arise in the implementation of these approaches. Case Studies in Bayesian Statistical Modelling and Analysis: Illustrates how